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THE PHYSICIAN AS A CHARACTER IN FICTION.

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"Medicine is one of those professions that demand talent and bonheur but more of the latter than of the former."

Choosing a subject for one's presidential address may be safely recommended as a holiday pastime in the sense that the holiday time may all be passed in the effort and because of the vivid suggestion during that blissful season of brooks and things that babble. To control the surging billows and harness the tides of thought may be difficult in dog days but at the very worst a midsummer's madness may be welcomed in preference to an all winter's despair. Until this matter is settled one's efforts to work will be abortive, his outlook upon the world obscured by the ever-nearing fog of apprehension, and his relations with himself in high degree uncordial and depreciatory. Verily, to one haunted by the spectre of this duty neglected

> The sky is an inkstand upside down
> That scatters the world with its gloom.

It is the prerogative of presidents to survey the field of operation, to study the accomplishment of the past and to forecast the future, but in contemplating the picture from a prejudiced viewpoint, one may lose something of the sidelights or miss an important perspective. Optimism may arise from the clannish estimate determined by our professional relation. The less partial

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judgment of the lay writer is necessary to enable us to "see oursel's as ithers see us."

The physician is not in many instances the leading character in works of fiction, or so to speak, in the limelight of the story. We who have a fuller appreciation of his daily walk, his work and worries, his dreads and doubts, his successes and his failures, have marvelled perhaps that he has not found his way into fiction more frequently. His life is a tragedy, his daily round a romance. The pendulum of his emotions is always in extreme oscillation. There come to him the deepest griefs, the heaviest burdens, triumphs that exalt his self-appreciation to the danger point, reverses that engulf him in the abyss of misery and stamp humiliation upon the page reserved for the record of successful effort. He battles constantly with unseen foes, he wins in engagements where indications all point to the imminence of surrender, and he loses battles entered upon with high optimism and carried forward to a point which seems to assure the speedy lowering of the enemy's standard. His best work neccessarily fails of appreciation by the lay mind and the successes which have brought worldly favor and recognition are not rarely achieved through conditions in which superlative merit was lacking and fleet-footed fortune distanced deserving.

While as might be expected, there is often failure on the part of the lay novelist to appreciate the refinements of medical ethics and medical doctrines, one might look far for loftier ideals and more comprehensive views of the mental and moral equipment desirable in a physician than those displayed in MacLaren's "Bonnie Brier Bush;" in Balzac's "Country Physician," or in Sarah Orne Jewett's "Country Doctor."

Stories such as these and the lines quoted by Scott from Samuel Johnson, in his preface to "The Surgeon's Daughter," emphasize the importance to the daily life of the household of the old-time family physician, and though the specialist, particularly the surgeon, has had a measure of appreciation, it is the family physician to whom the highest meed of praise has been accorded.

Intuitive knowledge of disease and ability to act promptly in emergencies so well exemplified in the person of Dr. Leslie are priceless possessions of the physician. Indeed, many of our faith will hold with the author of "The Country Doctor," that

lacking such instinct the highest measure of success in practice is never attained.

Dr. Anther in "The Son of Royal Langbrith," and Cable's "Dr. Sevier" are of the same type. Dr. Anther was the loyal lover of Royal Langbrith's widow. He deeply resented the tyranny which she had secretly endured from her late husband but consciousness of the possible imputation of selfish motives led him to refrain from communicating to her coxcomb of a son, the true facts concerning the unworthy parent whom he had ignorantly idealized. At the widow's request he participates in a public ceremony in the father's honor, not, however, without previously apprising the orators of the true character of the one they were to eulogize, his own moral standards showing out in this matter above those of his brethren of the law and the ministry upon whom the duty of eulogists devolved.

His considerate and fatherly treatment of the daughter of the opium habitué is one of the finest passages in the book. "It's a little disappointing when we've got him so far along, that's all. But it is not a thing to discourage." "He set the bottle aside." "I'll bring it to him and have a talk with him." "Oh, do!" the girl said, back in her gayety again, "your talks do him more good than medicine."

On the whole the picture drawn by Howells of this rugged and honest character is satisfactory. "He kept his precepts for himself, his practices for his patient," ate recklessly and preferred unwholesome things, was tenderly sympathetic toward the young, was moved deeply by resentment, but never erred on the unjust or unfeeling side and through praiseworthy motives renounced a lifetime's dream of happiness through considerations of expediency.

Cable's Dr. Sevier, whose inner heart was all of flesh but whose demands for the rectitude of mankind pointed out like the muzzle of a cannon through the embrasures of his virtues, waged active war against disease. "To fight; to stifle; to cut down; to uproot; to overwhelm; these were his springs of action. To demolish evil seemed the highest of aims." Later years and a better self-knowledge taught him that to do good was still finer and better.

These sentiments have a familiar ring. Who, just out of

college but feels himself called upon to denounce errors, ecclesiastical, ethical, medical; how he fares forth, pinning his faith to the dictates of his freshly acquired science and intolerant of the acceptance of any dogma not founded upon that which is demonstrable. He must have the truth then, would prove all things, must have a reason for the faith within. As time goes on, however, such demonstration grows less and less important. He admits his neighbor's right to opinions, and if not concurring, concerns himself little therewith. His public duty to call the sinner to repentance becomes less and less obvious.

The possibilities that lie in the operation of trephining have been little considered by the novelist, and not in a fashion to indicate any depth of study as to the conditions for which such an operation may be undertaken. Balzac in Catherine de Medici, draws a striking picture of Paré, his courage, strength of character, and resourcefulness. In the greatest emergency of his life, however, his judgment seems to have been overborne and we are left in doubt as to just what motives actuated him in his failure to operate upon a supposed cerebral abscess in the case of the young King, Francis II.

Mary Mapes Dodge in a child's story, "Hans Brinker," introduces Dr. Brockman, the most famous surgeon in Holland, in appearance irritable and intolerant, but self-sacrificing and modest at heart as we of a humbler specialty know great surgeons to be. Dr. Brockman discovers the similarity between the case of Hans' father and one operated upon in a highly successful manner by a contemporary. "Did the man live?" asked the assistant respectfully. "I believe he died, but why not fix your mind on the grand features of the case." "You have," said the assistant, "other engagements to-day; three legs in Amsterdam, you remember, and an eye in Brok, and that tumor up the canal." "The tumor can wait," said the doctor reflectively. It did wait, the operation was performed, and fortunately, the patient refused to follow the precedent set by the case cited, living as a testimonial to the skill of the great operator and to consume large quantities of his good victuals and wine, thereby liberally confirming the well known reputation of the scowling surgeon for practical philanthropy.

One's sympathies are strongly enlisted for the unfortunate New

England quack of the Pratt Portraits. His mother, Mis' Bennett, came from an "uncommon smart family, the Pratts of Dunbridge," and it was regarded a real "eddication" to Anson to be the son of such a woman. She had an ill defined notion that doctrine and docterin' had more similarity than that of mere sound and gave her son to homeopathy and to the people in imitation of Luther who defied the priests who were "keeping religious docterin' all to themselves." Homeopathy was then just coming into vogue. Among New England housewives who liked to feel themselves equal to any emergency the little wooden cases of bottles filled with palatable remedies were welcome possessions.

Anson, brought up to the spectacle trade, permitted himself to take up homeopathy on his mother's instigation. It seemed strange to the neighbors that he should "suddenly pick up and know so much 'bout people's insides, but they accepted the dispensation on the comfortable theory that homeopathy meant home-made or something of the kind."

Poor Anson was his own worst dupe. He, like Dr. Breen, had always thought of saving life, not losing it, and confronted by a severe case of pneumonia called consultation too late. He stood out for the principles of his "school" for a time but the denunciation of Dr. Morse pierced his very soul. The patient died and from that moment he renounced practice, gave up matrimonial aspirations, took upon himself the care of his dead client's family, lived a saintly life, educated in medicine his patient's son, and eventually died from a malignant disease for which the young surgeon's knife had been used unsuccessfully. He lived a life of self-denial and expiated his fault, meriting the proud distinction conveyed in the eulogistic words of Dr. Morse: "I should feel it an honor if you would shake hands with me."

Howells' Dr. Breen, laboring under the double handicap of homeopathy and femininity, had chosen the work in the intention of giving her life to it in the spirit in which other women enter convents or go out to heathen lands. A disappointment in love led her to belive that she had put away the hopes and pleasures to which a young girl aspires, failing to realize that she could not escape from being a woman by becoming a physician. She finds herself at the outset of her professional career unexpectedly in the medical relation to a giddy guest, a neuropathic consump-

tive of flirtatious instincts. Her consultation with Dr. Mulbridge over the case of the guest who was really ill and *now* wanted a doctor, resulting in failure to discover a basis for joint medical care, she abdicates the physician's prerogative and assumes that of nurse. In that capacity she engages the affections of Dr. Mulbridge, who though forceful and usually discreet, fails dismally in love making. His impression that the same vigorous tactics will obtain to win the woman as have been of service in combatting the vagaries of impressionable invalids, receives as it should, a rude shock (any other doctor almost, could have told him better) and the offer of renunciation of the true medical faith in order to win her favor, with his consignment of the State Medical Association to the devil, is a sad confession of weakness in a virile man, caught in love and oblivious to folly.

Dr. Breen, with rare adjustment to a more congenial ordering of things, promptly announces her attachment to a previously rejected suitor, precipitates herself into a pair of coat-sleeved arms open to encircle her and surrenders to a dominating spirit.

Dear old Doctor Sangrado, of Gil Blas, who had acquired a great reputation with the public by a pomp of words, a solemn air and some lucky cures, was the original hydrotherapeutist. Health consisting in his view in the humectation and suppleness of the parts, he advised water in great abundance as the "universal menstruum that dissolves all kinds of salt." He insisted that in small amounts it served only to disentangle the particles of the bile and give them more activity; whereas they should be drowned in a copious dilution. Like some other sanitarians who trust much to water in the treatment of disease, he recommended a vegetable diet and did not approve of eating a bellyful, even of that. To deny the stomach things that were palatable, to bleed and to drench with water constituted the principles of his practice which both in his own view and that of his ambitious student, Gil Blas, was so uniform in results as to inspire the reflection of the latter; "I take heaven to witness that I follow your method with the utmost exactness, yet nevertheless every one of my patients leaves me in the lurch. It looks as if they took a pleasure in dying merely to bring my practice into discredit. This very day I met two of them going to their long home." To which Dr. Sangrado replied that if he were not so sure of the principles

on which he proceeded, he should think his remedies pernicious but having written a book extolling frequent bleeding and aqueous draughts, he would not be willing to change methods and deny his own work.

The shady side of the physician's life is depicted in Zola's "Dr. Pascal" and "Page d'Amour." Dr. Pascal's attempt to solve certain problems in heredity by the study of his own ancestral tree was regarded an offense and profanation by his mother and an old-time servant of the family. He is assisted in the work by his niece and during its progress they discover themselves in love. Forgetful of everything but the object of his devotion he abandons all other interests. Decline and discouragement come and true to his own prediction death by angina pectoris terminates a worthless and unhappy existence. The story is full of tragedy. Stung by poverty, he essayed to obtain money for services long before rendered. His trials in the thankless task will be appreciated by many executors of estates of deceased physicians. An old magistrate whom he had once treated for an affection of the kidneys was first visited. This one explained that he would pay him in October, at which time he expected some money. A septuagenarian paralytic expressed offense that he had been so rude as to send her a note by a domestic and became so vigorous in her criticism of this act of impoliteness that he felt on the defensive and called upon to present excuses for his conduct. One he found suffering from a fever and as impoverished as himself and hadn't heart to formulate any request for money. He was equally unsuccessful with a haberdasher, the wife of an attorney, an old merchant and a broker, all in comfortable circumstances. One had one pretext and another another. There were those who affected not to comprehend him. There remained a marquise, a widow, of an old family, and very rich and avaricious. Her, he had kept for the last. She complained that her tenants did not pay and he received nothing, but she succeeded in obtaining a gratuitous consultation. "And you gave the consultation?" asked Clotilde. "Without doubt. Could I do otherwise?" he replied.

One refreshing sidelight in Page d'Amour is the momentary triumph of the professional spirit over emotional impulsion.

He (Dr. Deberle) entered the room, trembling yet compre-

hending indifferently what she said. In the chamber at this hour of the night, in the midst of linen and clothing scattered about, he detected again the odor of verbena which had affected him so much on the evening when he had first seen Helen dishevelled, her shawl gliding from her nude shoulders. He heard nothing, his passion would not be still. He perceived her neck, her hair. He closed his eyes to resist the temptation to kiss her. His mind filled with foolish desire, he felt the child's pulse in a machine-like manner, yielding to professional habit. The battle was strong, he rested immobile a minute without appearing to know that he held the poor little hand in his own.

"Has she high fever?" the mother asked.

"A high fever you think," he repeated.

The little hand warmed his own. There was silence. The physician awakened in him. He counted the pulse. The flame in his eyes became extinguished. Little by little his face paled. He bent over and regarded the child attentively. Then he murmured. "The access of fever is very violent. You are right." His desire was dead. He had no longer any passion except to be of service to her. All his sang-froid returned. He seated himself and questioned her mother upon the facts preceding the crisis.

Suffering remorse from an unfortunate misstep in early life, Balzac's Country Physician found himself meditating suicide. Not satisfied with the philosophy of Epicurus or that of the Stoics which justified self-destruction under certain conditions, he turned to the Evangelists, whose example of devotion and constancy inspired him with new courage. "One with strength to die, has strength to battle," and to refuse to suffer is not strength but weakness. To lead the life of a hermit in some distant country presented itself as a refuge, but to one of his lofty appreciation of the truth, misanthropy appeared a species of vanity concealed under a porcupine skin and not a Catholic virtue. He gave thought to entering a religious order but cast this aside, recognizing in the monastic life a sort of sublime egotism, unprofitable to anyone and after all but prolonged suicide. "I do not condemn it, sir," he said. "The Church has opened these tombs; they are without doubt necessary to certain Christians, altogether useless in the world. In the end Benassis decided to devote him-

self to soothing the needs of the poor, as does a sister of charity, with a whole community as his sphere of action.

He believed that those able to compensate the physician for his services should in doing this assist him in discharging his duties toward the poor. "But, would it not be proper to arrange about the price?" The price of what?" said the physician. "You cannot entertain me and care for me here without." "If you are rich," replied Benassis, "you will pay well; if not, I ask nothing."

Balzac's writings show an exalted appreciation of the physician. Dr. Minoret in "Ursule Mirouet" is a delightful character.

The danger of misunderstanding the motives of one living a life complicated by the confidences of patients, is well brought out in the story of Dr. Dannz und seine Frau (W. Heimburg). Frau Dannz believed her husband sentimentally interested in a patient whom he had long known in the intimate association of his own home, where he brought her after convalescence from a suicidal attempt. The illness of his mother furnishes an opportunity for the sometime patient to proffer her services as nurse. The wife attributes her husband's long absences and preoccupation to something more than the illness of his mother, becomes despairing and leaves her home. She subsequently finds herself innocently compromised by the all too obvious attentions of a painter. The husband, through the offices of a busybody friend is apprised of the growing scandal. Nothing could be more admirable than his reception of the news. He refuses to believe it, his own rectitude apparently furnishing him confidence in that of his wife. He will receive no explanation, although she is insistent upon giving it and his magnanimity removes the last vestige of her suspicion.

Paul Bourget poses a difficult medical question as seems to him in "A Matter of Conscience." A young physician sent by his venerated master, Trousseau, to a distant point to minister to a patient suffering from Bright's disease and *in extremis* armed with full direction as to what to do in different emergencies and enjoined to forget that which he sees, hears, and learns at the bedside, is confronted by a request from the invalid to secretly send telegrams to four sons living at a distance to come to his bedside at once. The wish complied with, he overhears a conver-

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sation, excited and denunciatory on the part of the patient, pleading and self-effacing on the part of the wife, in which it appears that the motive for summoning the sons is to denounce the mother in their presence and draw from her a definite statement as to the parentage of one. She declines to give the information sought but her whole manner indicates the crushed, miserable, erring wife returned to her allegiance and thoroughly repentant. A crisis in the condition of the patient follows this interview, terrific uremic seizures appear, and the medical remedies suggested by Trousseau failing to bring about improvement, bleeding suggests itself. The physician feels that consciousness will follow resort to this procedure and that sufficient time will elapse before death to permit the interview with the sons. He heartily deplores this visit. In great pity for the wife and sympathy for the sons whose future is certain to be blighted by the impending revelations, realizing that death can in any event be deferred for but a day or two, he holds parley with his conscience. "Can I be the accomplice in this infamy in prolonging an existence which I know will soon terminate and in doing so cause untold suffering to the miserable wife and these four sons. What of their future, in the army, in diplomacy, in the polytechnic school—"No, I will not be a party to this hideous work." "After all, the bleeding may accomplish nothing. It may be omitted. There are physicians who discountenance it." "Yes," replied another voice, "but if you were elsewhere caring for some patient what would you do?" and in spite of myself, I responded, "I should bleed." "The old and venerable formula of Trousseau, *nec visa, nec audita, nec intellecta,* suddenly crowded itself into my memory. I should act as if I had seen, heard, or comprehended nothing. My duty as a physician was to the patient, first and last, independently of any other consideration. But what was my duty as a man? Was I not obliged to prevent this abomination? The disease would do its work. But after? I saw in my mind's eye the patient dead and myself returning to my master in Paris and rendering account of my stewardship. He would say to me, 'Have you bled?' I could see the glance emphasizing this question. I felt that it would be physically impossible to endure it. It would be my own medical conscience that would look at me through these piercing eyes and condemn me." How did he

decide? As physicians, you have answered the question precisely as did the story.

Dr. Ox in Jules Verne's story under that title, was a rare old mischief maker. Under pretense of supplying Quiquendone with illuminating gas, he surreptitiously introduces oxygen into the homes and public places of this staid old Flemish town which the unprincipled geographers have left off the map. The first public scandal resulting from this nefarious performance is an altercation between a physician and a lawyer in which the damaging charge, "You do not always measure your words well," is publicly made. Imagine how the old town rocked under such an unprecedented and burning allegation. But this is not the worst. Other quarrels appeared and ambitions developed. Cabbages grew as large as bushes, courtship was shortened from ten years to a few weeks, and the good old measured music gave place to jiggy whirling things whose rhythm caused venerable matrons to lose their heads and become intoxicated with the sentiments of youth. Operas which under the old regime consumed three days in rendering were shortened to eighteen minutes. Litigation with a neighboring province pending for some centuries concerning the depredation of a vagrant cow, occasioned a declaration of war. Animal life was abbreviated by the tremendous output of nerve and muscular force. No one can predict where all this turmoil would have ended had not the doctor's man Friday turned the stop-cock and shut off the supply.

The students of medicine of an earlier generation should be interested in the personality of Dr. Rameau (Ohnet). He had a penetrating glance and his presence inspired immediate confidence. A deep ridge at the root of the nose, gave to his physiognomy a terrifying aspect at times, and its appearance indicating that something had gone askew, was the signal for alarm among the students. He swore at his assistants as a cab driver at his horses. All felt his puissant blows and a sombre joy overcame him in buffeting the presumptuous. As is said by the habitual detractors of genius, it was said of him, that he was a trifle insane and later depression and the renunciation of medicine would seem to confirm this. He had singular audacity and had performed many marvelous surgical cures. He bandaged with a deft hand. How the thoughts of the older ones hark back to student days.

They have looked from the benches of the amphitheater upon the counterpart of Dr. Rameau and noted with awe and admiration his studied carelessness in dress, his impressive physiognomy, his air of indifference, his spectacular and from present day standards, septic performances.

Dr. Rameau was a non-militant atheist. The study of physiology had determined a disbelief in the spirit and intolerance in discussing the subject. He despised the output of his friend, Talvanne, alienist, but made use of the latter's methods to establish the contention that the child of his wife, young, religious, and in love with a painter, was not his own. His prescription for the follies of love, "Baths of bran, good nourishment, and two hours' walk in the garden each day," may be worth remembering.

Talvanne, was more self-depreciatory than would seem to be necessary, notwithstanding daily measuring beside his refulgent surgical confrere to whom he gave credit for "Notoriety borrowed from your (his) glory." He saw in all criminals the irresponsible, called himself "the humble guardian of the insane," the "custodian of the demented," "a maniac caring for maniacs and not a therapeutist." In short, he represents the popular view of the psychiatrist of thirty or forty years ago, one indeed not wholly extinct at a much more recent period. "I want a doctor," screamed a hackman from the crowd around the train when our soldiers returned from the Spanish war. "Here," I said, hurrying forward, pleased to be of some little service. Then came the frost. "Oh, it's you, doctor! I want a physician." For an expression of Talvanne that "a patient who believes himself Napoleon or Jesus Christ is less curable than one who imagines himself Bernadotte or John the Baptist," there is nothing confirmatory in my experience. Your judgment in the matter is solicited.

George Eliot's "Middlemarch" justly ranks among the great novels. Lydgate is evidently a favorite of the author. "He had the medical accomplishment of looking grave whatever nonsense was talked to him, and his dark steady eyes gave him impressiveness as a listener." He said, "I think so," with an air of much deference. There was a careless refinement about his toilet and utterance. He was able to gain Lady Chettam's confidence by tactfully admitting that all constitutions might be called

peculiar, hers possibly more peculiar than others. His voice was habitually deep and sonorous, yet capable of becoming very low and gentle at the right moment. About his ordinary bearing there was a certain fling, a fearless expectation of success, a confidence in his own powers and integrity much fortified by contempt for petty obstacles or seductions of which he had had no experience. But this proud openness was made lovable by an expression of unaffected good-will.

Setting forth unfortunate matrimonial alliances as destructive of ideals and paralyzing to effort is the obvious motive of the story. "Middlemarch" is a tale of matrimonial misfits. Lydgate enters practice, intolerant of the conservatism that learns nothing, of the professional work that never advances. He is no more bumptious than many young men fresh from college, filled with the conviction that self-assertiveness implies success. He doesn't mean to be uncharitable but is somewhat scornful and lacking in consideration for his confreres.

Lydgate was unable to reckon with the public opinion, the result of rooted prejudice and confidence in the essential rightness of that which has "always been done that way" and concedes to the public a far greater degree of discrimination as to physicians than it ever displays. His engagement to Rosamond Vincy came about in the most natural fashion. "He regarded plain women as he did the other severe facts of life to be faced with philosophy and investigated by science." But, Rosamond seemed to have "the true melodic charm," and as the author cleverly puts it, "when a man has seen the woman whom he would have chosen if he had intended to marry speedily, his remaining a bachelor will mostly depend upon her resolution rather than on his." Rosamond was extravagant, feather-headed, and destitute of common sense. She had no conception of the value of money or care for ways and means. He finds himself heavily in debt early in his matrimonial career and his unsympathetic life partner is constitutionally incapable of co-operating with him to avert inevitable disaster.

Caring for the disgraced protegé of Bulstrode, in alcoholic delirium, Lydgate fails to discern the interest the latter may have in his death, and unwisely accepts Bulstrode's tender of a loan. The patient unexpectedly dying, he comforts himself with-

out inquiry as to whether his directions have been carried out, with the assumption that matters have gone wrong despite his careful medical prescription. Too late he finds himself in the mind of the ungenerous public an unconscious accomplice in the fact of the patient's death.

Mr. Lydgate had the jealousy of the city practitioner and the city medical school.

"There are few things better worth the pains in a provincial town like this," said Lydgate. "A fine fever hospital in addition to the old infirmary might be the nucleus of a medical school here. A born provincial man who has a grain of public spirit as well as a few ideas should do what he can to resist the rush of everything that is a little better than common toward London. Any valid professional aims may often find a freer, if not a richer field, in the provinces."

Every phase of the physician's life is touched upon in this remarkable story. How we sympathize with Lydgate in his plans for the organization of the new hospital and how much regret is felt that the means for its support are not forthcoming from some other source than the unworthy and sanctimonious Bulstrode.

A discriminating taste in sweethearts is one of the most important assets of the physician and has its commercial as well as its sentimental value. This taste was unfortunately not one of Lydgate's possessions. The impression is insistent that had he been successful in marriage, the promise of a useful life in his profession might have been fulfilled. Self-sufficiency would have been modified in time by inevitable reverses. Tactful suggestion from a sagacious helpmeet tempers intolerance and wears smooth the rough edges of egotism, while her subtle influence proves a potent factor in restraining that disposition on the part of mortals "easily tempted to pinch the life out of their neighbors' buzzing glory." Rosamond lacking all the social and ethical values of a physician's wife, was a millstone about Lydgate's neck.

Dr. Manette, the ex-prisoner of the Bastille, told of in Dickens' "Tale of Two Cities," furnishes a study in insanity. It is impossible to classify the case, although the conduct of the patient is to some extent suggestive. He returned to his shoe-

maker's box as mental confusion appeared precisely as many patients suffering from alternating psychoses take up habits of activity unknown in the more comfortable intervals.

Jobling, the medical examiner, serving for fee and reward, as he was particular to explain to prospective patrons of the Anglo-Bengalee Disinterested Loan and Life Insurance Company, was a shrewd one. "He had a protentously sagacious chin and a pompous voice with a rich huskiness in some of its tones that went directly to the heart like a ray of light shining through the ruddy medium of choice old Burgundy." Dickens caricatures him gently and evidently has respect for his sagacity. Jobling was of luxurious tastes. He was a stickler for the privileges of the profession and an upholder of its dignity and objected to the apothecary in the "drama of what's his name's" as a low thing and "out of nature altogether."

In this connection it may be mentioned that Bevan, the retired New York physician is the only American for whom in Martin Chuzzlewit, Dickens has a pleasant word.

The agitation of Dr. Bovary, called upon to care for a broken leg, his attempts to recall what the masters had taught and to collect his fragmentary ideas on the subject of fractures, his finding the adjustment of the one in question free from difficulty, his caressing words to the patient "with which the surgeon oils his bistoury" are familiar. One's first case is usually much simpler than the imagination has pictured it.

Poor, imbecile Bovary, married the first time unhappily to a widow of his mother's selection, and released from this relation by the death of his spouse, was married the second time to the daughter of a peasant educated beyond her sphere, full of mysticism and romanticism, erotic and indulging the outward forms of religion after the fashion of the sexual neuropath. It is impossible to feel other than pitying interest in his fruitless struggles against the handicap of a defective mental organization; and the abiding confidence in the wife who betrays him, effects his financial ruin and eventually commits suicide, call for some measure of appreciation if not respect. This story of Madame Bovary by Flaubert furnishes a lesson in the art of retaining affection which may appeal to our friends, the orthopedists. She is ambitious for her husband to attain renown through surgical achievement, and

pictures her indifference disappearing in the glamour of his spreading fame. With another, an obsequious pharmacist, she induces a patient to be operated upon for the relief of club foot. Bovary operated with misgivings. His friend, the apothecary, descended to recount the result to the five or six curious observers standing about imagining that the patient would at once appear walking erect. Charles, having placed the limb in the mechanical appliance, returned home, where his wife anxiously awaiting him at the door, threw herself upon his neck. He ate much and took a cup of coffee, a species of debauchery which he permitted himself on Sunday only, as a rule. The evening was charming, full of pleasantries, of delightful dreams. He spoke of their future, of the improvement soon to follow in their menage. She found herself almost happy in a new, a saner, and better sentiment, indeed with a sort of tenderness toward the poor fellow who cherished her. The idea of Rodolphe passed through her head to be sure, but her eyes returned to Charles. She even remarked with surprise that his teeth were far from bad.

And how the next day narrative of the matter in the local press reminds us of the mischievous reporter and the things he ought not to do. "In spite of the prejudices of a large part of Europe, light now begins to penetrate in our country. Tuesday our little city of Yonville was the theater of a surgical experience which is at the some time an act of high philanthropy. M. Bovary, one of our most distinguished practitioners, has operated upon Hippolyte Tautain, a stable boy for twenty years at the Hotel d'Or. The novelty of the attempt and the interest which is attached to the subject had attracted such a crowd of people that it was really impossible to pass the threshold of the establishment. The operation, moreover, was performed as if by magic and scarcely a drop of blood came upon the skin, when so to speak, the rebellious tendon yielded to the efforts of art. The sick man, a strange thing (we tell it from seeing) did not complain of pain. His condition up to the present time, leaves nothing to be desired. It is entirely proper to believe that convalescence will be short; and who knows but at the next village fete we shall see our brave Hippolyte taking part in the Bacchic dances in the midst of a chorus of jolly companions and thus prove to all eyes by his animation and his capers, his complete cure. Honor

then to these generous wise men! Honor to these indefatigable spirits who devote themselves to comforting their kind. Honor! three times honor! Is it not a fact that the blind shall see, the deaf hear, and the lame walk! But that which fanaticism formerly promised to the elect, science now accomplishes for all men! We shall keep our readers informed of the successive phases of this remarkable cure." But alas! nothing succeeds like success and hopes for the rehabilitation of Bovary's disordered household went glimmering through the outcome of bad surgery.

"Poor Miss Finch," by Wilkie Collins, is not as finished and satisfactory from a literary point of view as a story might have been, constructed from the rather intricate plot to which it owes origin. A blind girl, relieved temporarily of the infirmity through a successful surgical operation, is cheated into accepting a twin brother of her fiancé in that relation; but is undeceived by the gradual waning of the romantic attachment based upon tactile and auditory impressions developed during the period of blindness and not enhanced by contact after sight is restored. The bona fide fiancé lends himself to the deception, fearing to reveal his complexion—blue from the use of nitrate of silver taken for the cure of traumatic (sic) epilepsy—and incur the risk of permanent aversion, based upon an unconquerable antipathy to dark colors which the blind girl had felt but did not otherwise distinguish. The surgeon, Herr Grosse, performs a skillful operation, standing out bravely against the opinion of his brother consultant, Mr. Sebright, of London. The latter is of unexceptionable manners, but unsuccessful; the former brainy and boorish, a favorite conceit of authors being that boldness and success in the surgical line imply manners so destitute of refinement as to merit social ostracism on the part of their possessor.

Three precious scoundrels including a forger, a man of the world, and Dr. Critier, der Irren Artz (von Bischoffshausen) conspire to defraud: a murder results, and an innocent man is executed. The tragedy is witnessed from a hotel window by an invalid who recognizes in the man upon the scaffold proclaiming his innocence, a brother from whom she had been separated for many years. The shock destroys her mental balance and she is placed, through the connivance of her nephew, the assassin, in Dr. Critier's private asylum. Many vicissitudes befall her, among

others poisoning by her nephew who has ingress to the institution through a side portal. Dr. Vulpian, of Paris, is consulted. He detects from the inspection of vomited matter the presence of datura stramonium and with the physician then in charge (who had bought out the refugee, Dr. Critier) lays a successful plan to capture the villain. Execution follows and the patient is restored to health through the shock of witnessing it from the same room and under circumstances similar to those incident to her breaking down. *Similia similibus curantur.*

It was impossible, says Tolstoi, to make ill health out of the fact that Ivan Ilyitch sometimes complained of a strange taste in his mouth and an uneasiness in the left side of the abdomen, but the feeling became more and more manifest. There was a dull weight in the side, and an irritable temper that led to frequent domestic jangles; and the little islands on which husband and wife could meet without fear of explosion grew fewer and fewer. His querulousness began just before dinner. Sometimes there would be a nick in a dish, as the apparent exciting cause of anger, sometimes his food did not suit him. At first his wife answered in kind; then she concluded that the bad manners proceeded from trouble with assimilation and held her peace, regarding her meekness as highly meritorious. After one scene in which Ivan had been particularly unjust and disagreeable and which he accounted for on the ground of ill health, she suggested a famous physician and medical care.

Ilyitch found everything as he expected—everything was done in the usual way—the having to wait and the pompous doctorial air of importance, so familiar to him; the same as he himself assumed in court; and the tapping and the auscultation; and the leading questions requiring answers predetermined and apparently not heard; and the look of superlative wisdom which seemed to say "You, now, just trust yourself to us and we will do everything; we understand without fail how to manage; everything is done in the same way for any man."

The doctor said, "Such and such a thing shows that you have such and such a thing in you; but if this is not confirmed according to the investigations of such and such a man, then you must suppose such and such a thing. Now if we suppose such and such a thing, then—" For Ivan only one question was momen-

tous. Was his case dangerous or not? The doctor ignored it as idle and undeserving of consideration; the only thing to do was to weigh probabilities—floating kidney, chronic catarrh, disease of the blind intestine. In the end the question as to kidney or bowel disease was settled by the doctor in the most brilliant manner in favor of the bowel trouble—making a reservation in case an analysis of urine should give new results and then the case would have to be examined anew.

All this was exactly what Ivan Ilyitch has done a thousand times in the same brilliant manner for the benefit of the prisoner at the bar. From the doctor's resumé Ivan Ilyitch came to the conclusion that as far as he was concerned it was bad; but as far as the doctor and perhaps the rest of the world was concerned, it made no difference.

It will be observed that this story is told of the internist, not of the psychiatrist. It is probable that we of another branch of the profession have encountered incidents similar to the one related occurring in the practice of our friends in internal medicine and surgery. For their sakes, I would, if I might, conceal the frank statement of a ghastly situation but candor compels the truth though through it I reveal my neighbor's weakness. It shall not be blinked.

The physician, Zosimoff, in Dostoievsky's powerful psychological novel, "Crime and Punishment," was a large and gross man of twenty-seven, of bloated face, covered with blemishes and indifferently shaven. His hair was straight and nearly white. He wore glasses and on the index finger of his thick hand blazed an enormous ring. He wore loose garments of studied elegance. His linen was irreproachable and a heavy gold chain dangled from his waistcoat. There was something lazy and phlegmatic about his carriage and to appear careless evidently cost effort. Despite the watchfulness which he exercised upon himself, a pretentious manner was constantly in evidence. All his acquaintances found him insupportable but esteemed him highly as a physician.

He was bombastic and egotistic but seems to have had a good grasp of the case in question and loved to air his erudition. The delirious condition under which the patient seemed to be laboring was rightly judged to be the "product of complex influences, physical and psychical, such as preoccupation, fear, disquiet,

and the disposition to indulge in revery." Perceiving without seeming to do so that he was listened to attentively, he elaborated complacently upon this theme. Eventually he retired from the room enchanted with the visit and himself.

The picture of Boutan drawn by Zola in "Fecondité," is that of the conscientious physician, the wise counsellor in trouble, the friend of the family, and the safe medical advisor. Himself a bachelor, he was a strong advocate of the position taken by our honored President in respect to race suicide and deplored the evils which are the raison d'etre of the book. The portrait of Gaude, on the contrary, is sanguinary and revolting. He is held up to just execration and the pages devoted to his work, read and pondered, might well deter the over bold and thoughtless surgeon from the terrible blunder of ill-considered operating. The sketch of Mainfroy, the aide of Gaude shows an insight on the part of the author into a certain sinister type of medical humbug. He was a large boy of thirty, always in frock, his face grave and wearing a wise look. His clientele was composed largely of women who assure to mediocre physicians a sufficient income. It was his rule to display much gravity over the least indisposition and to lay undue stress upon the slightest nervous symptoms, hearing complaints patiently, prodigal of remedies. Called to see a patient suffering from the results of abortion, he was chary of words, but frightened her by an attitude of suspicion of subsequent evils and chronic disease. She became his willing slave. She was disquieted by the movements of his head, by his reticence, by his equivocal words, evoking all manner of frightful infirmities. He esteemed himself as of perfect professional honesty. He would not personally abuse the confidence of an invalid outside of the little medical "gateries" which he permitted himself with women; but this did not prevent him from being on occasions the *rebatteur* of certain celebrated surgeons; bringing them clients and receiving his percentage in all serenity of soul. That which followed did not concern him. He had simply served as an obliging intermediary and it was for the prince of science, the great operator, to see and to act.

For nearly a year, Mainfroy and Serafine played light comedy. Neither one would have been able to say which had first suggested operation. He came regularly each week. She called him, exag-

gerated her ills and spoke of atrocious pain, and when she lost patience there came a time when operation was mentioned. He had for a long time shaken his head over this, preferring to keep a client who paid well, but he knew the end would be that she would escape him; and herself consult the surgeon. He knew that the slight inflammatory condition remaining would be inconsequential if she took proper care of herself, but affected to despair of her recovery and said it would require months and months at best. Then with these conditions one never knew. Perhaps there was a complication which escaped his diagnostic skill. One day he pronounced the word "cyst" without affirming anything and at once it was a question of Gaude, the operation being practically decided upon.

Dr. Antonio (Ruffini) was a physician, a botanist, a lover of nature, a political revolutionist, a warm-hearted man and eventually a martyr to his devotion to his country. He encounters an overturned stage-coach containing an English baronet and his accomplished daughter, the latter of whom had through the accident sustained a broken leg. Her father, of whom it was said, "his sojourn abroad left undisturbed the spider webs of prejudice spread on his intellect which kept safe all the dead fires of his youthful notions," was full of dislike for foreigners.

"Bleeding, no bleeding whatever on any account. I will have no bleeding. Dr. Antonio colored up to the white of his eye—and who knows what he was going to reply, but checking the ready rejoinder by a strong effort, he said slowly and calmly, 'Not even if I assure you it is absolutely necessary?'" Beaten but not persuaded, Sir John sent for other medical advice in the absence of Dr. Antonio. This consultation, for such owing to the new physician's recognition of professional ethics, it proved to be, came out with honor to Dr. A., who was finally installed in the care of the case without reserve. Here too he acted in a broad and dignified spirit, overlooking the offense of the father in his interest in the patient. Reviewing the situation, however, one can hardly escape the conclusion that he was unwise in concealing in the beginning from such an irascible man the extent of the patient's injury.

Dr. Wilson in "A Wheel of Fire," by Arlo Bates, is hardly worth introducing except for the account of the disappearance

of the insane brother. This has a home-like ring. There is that lack of accuracy as to the precise time of departure of the escaped patient with which we are all painfully familiar.

"I am Dr. Wilson," he said. "Mr. Wainwright escaped this afternoon. He happened upon a paper this morning which mentioned his mother's death. He declared he must come home to comfort you. I gave orders that he should be carefully watched but he was gone at supper time and I started out to find him." "Do you know at what time my brother left the retreat." "Not accurately. He was in his room at two o'clock, but it must have been very soon after that he went out for I was at my desk writing by three with my door open so that I could see the whole length of the corridor." That he could see the whole length of the corridor is not quite comprehensible to a physician living apart from patients. It is learned, however, that Wilson was there temporarily for purposes of study. Under the circumstances we are not obliged to apologize for his making flippant references to the confinement of patients in padded rooms and we need not writhe under the thought that his manners are contrasted unfavorably with those of a representative of the legal profession.

Charles Reade is said to have been the pioneer in yellow literature. If "Very Hard Cash" had at the time it was written any reason to be, psychiatrists may comfort themselves with the reflection that tremendous strides have taken place in the care of the insane since 1863. It is a far cry from the Betsy Prig, of Martin Chuzzlewit, whom Dickens insists is typical of the hospital nurse of that period to the graduate nurse of to-day and from the private asylum portrayed in "Hard Cash" to the homelike hospitals of the present time. Such a story would have no vogue now among the reading public but many will in candor admit that it represents their boyish conception of the asylum, its indifferent or brutal management and its unfortunate inmates. Were matters as bad as painted, or did books of this nature determine the sentiment of popular dread and disapproval of institutions for the insane? Is it not likely that the unnecessary atmosphere of secrecy and the lack of direct acquaintance of the public with the internal administration of such establishments bred distrust and suspicion? "Hard Cash" is an apotheosis of charlatanism and a denunciation of professional opinion from

cover to cover. It is pedantic and prolix, but shows shrewd perception or vivid imagination on the part of its author. It is caustic and censorious, both as to methods of management and the lunacy laws of Great Britain with which the author is evidently familiar. Its interest for us, lies in the little mirrors held up of formulas in expression and the suggestion of biased attitudes in examination.

Alfred Hardie, in love with the daughter of a sea captain who had been defrauded by Hardie's father, was committed to the asylum through conspiracy. The examining physician was prepared to find him insane and could not escape prejudice from the early impressions introduced into his mind. Alfred's sister is innocently a party to the wrong. Dr. Wycherley was called.

"Papa," said Jane, "poor Alfred sleeps very badly; I hear him walking at all hours of the night."

"I thought as much," observed Dr. Wycherley; "Insomnia is the commonest feature. To resume; the insidious advance of morbid thought is next marked by high spirits, or else by low spirits; generally the latter. The patient begins by moping, then shows great lassitude and ennui, then becomes abstracted, moody and occupied with a solitary idea."

Jane clasped her hands, and tears stood in her eyes, so well did this description tally with poor Alfred's case.

"And at this period," continued Dr. Wycherley, "my experience leads me to believe that some latent delusion is generally germinating in the mind, though often concealed with consummate craft by the patient; the open development of this delusion is the next stage, and, with this last morbid phenomenon, incubation ceases and insanity begins. Sometimes, however, the illusion is physical rather than psychical, of the sense rather than of the intelligence. It commences at night; the incubator begins by seeing nocturnal visions, often of a photopsic character of hearing nocturnal sounds, neither of which have any material existence, being conveyed to his optic or auricular nerves not from without, but from within, by the agency of a disordered brain. These, the reason, hitherto unimpaired, combats at first, especially when they are nocturnal only; but, being reproduced, and becoming diurnal, the judgment succumbs under the morbid impression produced so repeatedly. These are the ordinary antecedent symptoms characteristic of the incubation of insanity, to which

are frequently added somatic exaltation, or, in popular language, physical excitability—a disposition to knit the brows—great activity of the mental faculties—or else a well-marked decline of the powers of the understanding—an exaggeration of the normal conditions of thought—or a reversal of the mental habits and sentiments, such as a sudden aversion to some person hitherto beloved or some—

"And, oh, doctor," said the distraught sister, "he knits his brow often and has given up his studies, won't go back to Oxford this term."

"Exactly," said the doctor, "and seeks isolation and is a prey to morbid distraction and worry, but has no palpable illusions, has he?"

"Not that I know of," said Mr. Hardie.

"Well, but," still objected the persistent and well meaning but misguided sister, "did he not say something to you very curious the other night about Captain Dodd and fourteen thousand pounds?"

Mr. Hardie's blood ran cold. "No," he stammered, "not that I remember."

"Oh, yes he did, papa. You have forgotten it, but at the time you were quite puzzled what he could mean and you did so," she put her finger to her forehead, and the doctors exchanged a meaning glance.

Descriptions of Alfred's admission under deception, his discovery that he was a prisoner, his attempts to escape, his frenzied conduct giving confirmation to the belief in his insanity, his interviews with the physicians, with the attendants, with the Lunacy Commission, with the erotic Mrs. Archbold, are given at intolerable length. The formulas of expression, the misinterpretation of testimony, the prejudiced viewpoint, the sufficient sprinkling of the plausible to carry along the exaggerated and the improbable are strongly suggestive of the story of a manic-depressive patient in the period of elation. It reads very much like the subtle prevarication of the more intelligent patients of this class, but is for us worth reading as showing the desirability of avoiding mannerisms, formalisms, and machine-like methods in dealing with the insane. Reade's own mental organization was peculiar. He

was litigious, quarrelsome, and intolerant, and has been called by a noted alienist "a splendid crank."

Other physicians beside the psychiatrist come in for a scoring in "Hard Cash." Alfred's fianceé, with unrecognized symptoms of love, is discovered by Mr. Osmond to have hyperæsthesia, or as the unprofessional person would say, "excessive sensibility."

Dr. Short, subsequently called, discovered a slightly torpid liver; a titled London surgeon that the heart was the peccant organ and the court physician, a somewhat morbid condition of the nervous system. It remained for the charlatan Sampson to discover the true malady.

To turn from this story and that of Christie Johnston, written in the same revolting spirit, to the "Bonnie Brier Bush," is like emerging from slime and ooze into the bright, crisp air of sanity and sunshine. Profound gratitude is owing to Ian MacLaren for the tribute paid the medical profession in the description of MacLure. "The Bonnie Brier Bush" is sweet to read, but he who fears the expression of emotion and would preserve a reputation for rigidity would do well to peruse it in the solitude of his room. It is a tale of devotion to duty and points to high appreciation on the part of its author of the physician in fact.

General Remarks.

On the whole the lay novelist has treated the doctor fairly, but the story faithful to the alienist remains to be written. Who will attempt this task? So far as the literature of the subject is concerned, the story of the asylum or hospital for the insane is the tale of wrong doing. Dr. Critier is a scoundrel, the physicians in "Hard Cash" are mercenary and repellant. Professor Hieronymus, in a story by Amalie Skram, is cold and egotistical and Dr. Wilson, in "A Wheel of Fire," represents nothing we regard as desirable in one having to do with the care of the insane. We may, however, comfort ourselves with the reflection that the appetite for the sensational is no longer so largely fed by the penny dreadful and that were there ever reasons for the animadversions of a Charles Reade, the time has long since gone by.

General hospitals once shared public disfavor as witness—Middlemarch. Then came popular appreciation of hospitals and

as time goes on they are more and more frequently called into requisition. The asylum of long ago had its horrors no doubt, but its present day successor is the refuge of the mentally afflicted. It justly commands public support and confidence and the story of its work is the story of the lives of devoted men and women inspired by exalted ideals and deep conscientiousness, working along scientific lines toward the amelioration of a trying affliction.

PSYCHIATRY AND EXPERIMENTAL PSYCHOLOGY.[1]

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Psychology and psychiatry have grown up in relative isolation from each other. Medicine, "the mother of the sciences," was less intimately connected with the birth and early life of psychology than with the origin of most of the other sciences. The study of the mind was first undertaken in systematic form by the philosophers, and this association remained for many centuries a controlling one in the history of psychology. Even at the present day, the question whether psychology should more properly affiliate with philosophy or with the natural sciences is regarded as a fit subject for discussion, and opposing views on it are expressed by eminent psychologists. Students of other sciences are sometimes inclined to deny the right of psychology to call itself a natural science, and for two reasons. On the side of method, there is still much that is current in psychological books and discussions that appears to the student of empirical science quite strange and foreign in tone. And on the side of results, doubt is expressed whether psychology really has anything to teach, which common sense and common observation have not sufficiently acquainted us with. Psychology seems sometimes to be engaged in an "elaboration of the obvious," in stating familiar facts in obscure phraseology, or at the best in putting together familiar facts into systematic shape, without adding to the store of facts. Whatever may be the proper abstract definition of a science, in the concrete we demand that a science which we are to study shall do more than classify and label facts that we already know; we require it to teach us something new; and on the practical side we wish it to guide our action where common sense is inadequate to meet the situation. These requirements are abundantly met by the physical, the natural, and the medical sciences; in comparison with these, psychology, the

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daughter of philosophy, certainly has some difficulty in making clear its title to a place among the sisterhood of the sciences.

But psychology has had a new birth; and medicine, if not its new mother, may at least be called its grandmother, since it is to the physiologists that the new line of development is principally due. Beginning in a small way early in the last century, progressing slowly for several decades, then spreading out with great rapidity, this new, or physiological, or experimental psychology—though its professors often backslide into the old unregenerate ways, even as physicians, too, often betray a leaning toward philosophical speculation, to little profit—yet on the whole recent psychology has shown a sincere purpose to search for new facts, and to develop adequate empirical methods for establishing them. Many of the results so far achieved are neither startling nor specially illuminating, yet material is gradually being accumulated that deserves the attention of whoever has to deal seriously with the workings of the human mind. Accordingly, we see that the day of applied psychology is beginning, and that, in spite of pessimism in high places, investigators are finding it possible to apply the results and especially the methods of experimental psychology to the solution of important problems in education, law, and even business.

Though isolated from each other, psychology and psychiatry have not been without interest in each other's results; it must be feared, however, that the knowledge each has had of the other has often been indirect and vague. Thus far, it appears that psychiatry has had the worst of the bargain, that she has given much more than she has received in exchange. The clinical observation of mental defects and abnormalities has thrown a great deal of light on normal psychology. The most definite information that we have received from you is perhaps the delimitation of certain mental functions by means of those cases in which the brain defect can also be demonstrated, as in aphasia and psychical blindness and deafness. The order of dissolution of the mental powers in such a disease as paresis is suggestive to us of their order of rank in normal life. Morbid states of exaltation and depression, with the incompetency that attends them, help us to formulate the conditions of efficient intellectual work. Delusions, phobias, fixed ideas—these seem to the psychologist to be

supplied by nature in lieu of some magic microscope which should magnify the scarcely perceptible details of mental life into such proportions that they could not be overlooked. And so one might continue cataloging the indebtedness of psychology to psychiatry, and run up a long list of items of information which you have supplied, and which we, so far as we have known and understood them, have found of value, and oftentimes of very great value, in analyzing the performances of the mind, and in pointing the way to further discovery.

On the other side, alienists have not been neglectful of the teachings of psychology, though it may be feared that they have frequently found them rather barren of practical applications, and even rather lacking in suggestions for the scientific description and explanation of mental abnormalities. Psychology might be a help in furnishing names and modes of expression, but for real insight into the workings of the deranged mind, it has perhaps appeared to offer little that could not be gained by an attentive observer who had never bothered his head with psychological books. This was almost necessarily the case so long as psychology based all its statements on common observation. To get special results special methods are needed. To increase the stock of facts beyond what common observation could reveal, psychology had to develop methods that were finer than those of common observation. This she has done to a considerable extent, and is doing more and more. While she is as yet in no position to point with swelling pride to her achievements, she may fairly claim that she has accomplished enough to be of some service; and may fairly ask to have her stock of goods re-examined by the psychiatrist, in the hope that he will find there something of use to himself. As an illustration of the change wrought by experimental methods, I may mention the application of psychology to certain legal problems. The criminal lawyer has to be a practical psychologist, yet the study of psychological textbooks has not proved of great assistance to him. He knew men from his own observation, though he might not express himself in the technical terms of the psychologists. But some one thought to apply the methods of experimental psychology to such problems as the reliability of the testimony of eye-witnesses, and unearthed such a degree of unreliability as surprised the lawyers. The

results of these and similar experiments that have been made were such as to demand very careful consideration from the legal profession.

Common observation is not a thoroughly reliable guide. There are, of course, facts so patent as to require no special precautions for their detection. But the further the experimental psychologist carries his researches, the more skeptical he becomes of the value of common views and easily accepted doctrines regarding the mind. The trouble is not indeed wholly one of observation; the tendency to supplement what we can see by what we imagine to be there, to speculate where we cannot prove, is perhaps ineradicable in human nature, and specially in psychology on account of its long-standing association with philosophy. There are current in psychology numerous well-appearing theories which when looked into are found not to rest on experimental observation, but on a few superficial statements of fact, eked out by a vast amount of logical construction. All such are properly subject to suspicion, and the more beautiful and self-consistent the logical construction, the more suspicious they are, because they are so much the less likely to owe their acceptance to agreement with fact. The experimental psychologist holds that we shall never know much about the mind until we take the trouble to find it out, and that the trouble will consist in controlling the conditions under which observations are made and in using sufficiently fine methods of observation.

As an example of a doctrine which owes its currency to superficial observation, and which, nevertheless, has been used extensively in the explanation of mental phenomena, we may take the view that the brain is very liable to fatigue. Common observation seemed to show that fatigue comes on very quickly in mental work, and this apparent fact has done duty in many psychological explanations. "Constant errors" in sense perception, shiftings and fluctuations of attention, changes in the efficiency of mental work, have been regarded as sufficiently accounted for by appealing to mental fatigue. The brain was supposed to fatigue so much more rapidly than the muscles, that what was apparently muscular fatigue has been explained as more probably brain fatigue. It was even suggested that the nervous system, by its capacity for quick fatigue, served to protect the muscles from

overwork, much as a fuse in an electric circuit, by burning out easily, protects the more valuable apparatus in the circuit from excessive currents that would damage them. There was a certain amount of inconclusive experimental observation behind this view, but for the most part it owed its acceptance to the common observation that people, or rather many people, grow tired quickly of mental work, and feel that they must stop. Experimental tests in prolonged mental work have, however, revealed a surprising degree of resistance to fatigue. A series of reaction time tests, continued all day and on into the evening, failed to show any marked decrease in speed. Memory tests continued without break for five solid hours showed a steady improvement throughout. School children have been found as successful in sharp mental tests at the close of school in the afternoon as they were at the opening of school in the morning. College students, so far from being mentally incapacitated by the hard mental labor of a three-hour examination, have actually done better in all sorts of mental tests after the examination than before it. More thorough study of the fatigue of the neuromuscular apparatus has shown that this fatigue is certainly in large part, and perhaps entirely, muscular. If muscular exertion is as far as possible excluded, as when the movements are required to be not forceful, but accurate, they can be repeated hundreds and thousands of times with no pause for rest, and without showing any marked degree of fatigue. In all probability, the central nervous system, like the peripheral nerves, so far from being quickly worked out, is capable of an enormous amount of continued activity without serious loss of functional power. How then are we to explain away the common observation of quick fatigue in brain work? Experiment shows pretty conclusively that this familiar form of fatigue is a sensory or emotional affair, a feeling of fatigue, not a true fatigue in the sense of incapacity. In case of the fatigue that appears early in muscular exertion, at a time when the muscles are still demonstrably in good condition for work, the fatigue is really composed of unpleasant *sensations* that come in from the active members. The tendency of these sensations is to make us stop the activity that is causing them; but if we resist this tendency, and continue the muscular effort, we find that we are not incapacitated after all; we can

still keep on, almost if not quite as well as before, in spite of the sensations of fatigue, which indeed usually disappear with the further continuance of the muscular activity. Similar remarks apply to the fatigue that is apt to come on early in mental work; it is composed partly of *ennui*—a mere emotion—partly of tendencies to do something more agreeable to the natural man, partly of sensations of strain arising from the eyes, neck, and various parts of the body, which dislike being held fixed in a cramped position. Let the mental worker resist this medley of incentives to stop work, let him determine to stick to it for a while longer, and he will usually find that his brain is still in good working order, that the feeling of fatigue passes away, and very likely that his best work is done after rather than before the time when his feelings told him he was played out. I have dwelt on the matter of fatigue partly because these results from normal persons may be of some interest to the psychiatrist for comparison with the conditions that obtain in abnormal brains, and partly as an illustration of the value and necessity of experimental methods for determining the real facts, even in the most familiar situations of life.

The main suggestion which as it seems to me experimental psychology has to offer to psychiatry is contained in just this demonstration of the insufficiency of common observation and the treacherous nature of logical schemes of mental function which rest only on common observation for their empirical basis. If this is true in normal psychology, it appears almost certain that it will prove true for abnormal psychology as well. The psychiatrist is to be sure concerned primarily with divergencies from the normal, many of which are so obtrusive as to require no special devices for their detection. That the paranoiac is deluded, the maniac excited, the hysteric unstable and suggestible, that certain patients suffer from hallucinations, or from amnesia, or from confusion, the common methods of observation sufficiently show. Moreover experimental methods cannot supplant and make unnecessary the methods of clinical observation that have gradually been developed in the experience of alienists. Just so, in the general practice of medicine, the thermometer, the test-tube and the microscope have not supplanted the less special methods of clinical observation. But just as recent progress in medicine

is largely due to the introduction of special methods from the sciences that have developed them, so it would seem that the path of progress in psychiatry, in so far as it lies in the direction of the differentiation of mental symptoms and in the understanding of the mental condition of the patient, will probably run parallel to the path of progress in psychology, the path of experiment. It must be true—I believe you will agree that it is true—in psychiatry as well as in psychology, that observation unaided by the special methods of experiment is often uncertain and fallacious; it is incapable of giving exact information regarding the mental condition and intellectual capabilities of the patient. It furnishes rough information, which is often but not always sufficient, and is sometimes misleading. The maniacal condition appears to be one of accelerated mental and motor activity; but tests have shown that this appearance of speed is deceptive, and that the maniac should be called slow rather than fast in his thoughts and movements. Similar tests have shown that the condition of alcoholic intoxication which seems to make a man preternaturally prompt and fertile in the production of ideas is at bottom a condition in which the process of association is slower than normal, and in which the stock of ideas is impoverished rather than enriched. To take another sort of case, idiots appear to constitute a class by themselves, a subspecies of the race, but tests seem to prove that they are after all not separable by any sharp line from normal individuals, that there is no typical idiot standing at the center of a "distribution curve" of idiots, but that they are simply those members of the race who differ in the most extreme degree from the normal type. There are probably numerous other instances, some of theoretical and some of practical importance, in which the current descriptions of mental abnormalities would be changed by the application of experimental methods. On the other hand there will be many cases where experiment will not make any radical change in the descriptions now current, but will simply make them more precise. Sometimes unaided observation hits the truth and sometimes not; since it is usually impossible to say, in advance of the application of refined methods, where they will greatly change our conceptions, and where not, it is best to try them wherever possible, and meanwhile maintain a healthy degree of skepticism regarding de-

scriptions that have not as yet been submitted to the most rigorous tests.

It would of course be foolish to speak as if the use of experimental methods would at once resolve all doubts throughout the complicated field of mental abnormalities with which you have to deal. Your experience would make you reject at once any such exaggeration of the powers of experiment. You have found that experimentalists sometimes disagree, and that the results of even careful experimental work sometimes need revision. Experiment is no magic key to unlock the mysteries of the unknown; it is no royal road to learning. There is nothing supernatural about it; it is simply a human means of delving after the facts, and it must be used by beings hampered by human shortsightedness and inefficiency. Everything depends upon the man who uses it. He must have insight and adaptability and a saving measure of common sense. He must also have training. The path of psychological experiment is beset with pitfalls. With many of these we psychologists have become familiar by bitter experience, and it would be a great pity if our experience should not be a warning to those who shall experimentally study the insane. Here certainly it seems that psychology is in a position to be of service to psychiatry. The methods of investigation which have been invented, tested, and sifted in psychological laboratories, and the precautions which have been found necessary in order to get reliable results, should be placed at the disposal of the experimental investigator in the hospital for the insane. These things cannot ordinarily be learned from books; they need to be handed on personally from one man to another; from which it follows that the experimental investigator in psychiatry should be trained in the psychological laboratory as well as in the hospital. The breadth of the training required makes it likely that the number of workers in this field will long remain small; but it is a work for experts, and a few really qualified men will accomplish more good than a host of dillettantists whose results are either meaningless or poorly established.

The proposal to utilize the methods of experimental psychology in the study of insanity is not entirely new, though it is recent. Enough has already been done to show that this is indeed a fruitful line of development. It would be instructive to summarize

the results already achieved, did not their number and variety already make it impossible to do so within a small space. The study of sensations, for which the methods of psychology are particularly well developed, has thus far not proved so productive as studies in certain other lines, though valuable results have come from examination of the narrowness of the field of vision, and of the inertia of the retina as shown in the non-perception of flicker, in hysteric and psychopathic cases. Motor studies have so far been more productive than sensory. Tracings of involuntary movements and tremors have proved instructive; records of the force and speed of voluntary movement, of the reaction time, and of fatigue, are still more promising. Qualitative analysis of the association of ideas has yielded results that add precision to the symptomatology of certain diseases. The speed of association has also been measured, and with interesting results. Studies of memory and the power of memorizing have made it possible to give a more exact account of the progress and decline of amnesia in the polyneuritic psychosis. Simple tests of mental efficiency, such as adding, have proved of considerable use. Practise experiments have shown that it is possible to improve the condition of certain patients by the use of systematic courses of mental training. Enough at least has been accomplished to make the outlook bright for any institution or qualified man who will undertake to promote the science by the use of these methods.

It would be presumptious in an outsider to attempt to tell you where your science is specially in need of advancement: inasmuch, however, as this address is largely a plea for the recognition and application of experimental psychology by students of psychiatry, I may be pardoned if I attempt to outline somewhat further the directions in which our methods may reasonably be expected to prove of service.

The prime service will be on the scientific side, in making possible a more exact description of mental symptoms and of the mental condition and degree of efficiency of different patients and in different types of derangement. In this connection, the possibility of quantitative studies deserves special emphasis. It is often urged that a science only becomes a science when it is able to express its facts and laws in measures and numbers; and psychology has sometimes been reproached for its inability to

make quantitative statements. The progress of recent times has, however, shown that it is possible to reduce some of the facts of mental life to quantitative form. One of the most revolutionary discoveries of modern psychology is that individuals differ in every respect, even in functions which the older psychology had assumed to be constant for all normal human beings. Moreover it has been found possible to measure the differences between individuals in various mental powers, and thus has arisen the quantative study of individual psychology, child psychology, sex psychology, race psychology, and animal psychology. The extension of this line of work to the insane, already begun, seems sure to increase the definiteness of our knowledge about them, and to place the symptomatology of insanity, to some extent, upon a quantitative basis.

The use of quantitative methods is likely to afford more exact information regarding the progress of the disease, and we may expect that, in time, curves of the change in mental symptoms, similar to the temperature curve, will be drawn and very likely prove useful for purposes of prognosis. In some cases, it may prove possible to try the tests before the appearance of actual insanity, and thus to discover minor symptoms that could be used in early diagnosis, just as it has been found possible in tabes to detect the deficiency of muscular sensibility by methods of quantitative psychology in cases where it could not be detected by the usual modes of clinical examination. In the same way, it may be found possible, and has indeed been found possible in certain cases, by quantitative methods to follow the further course of the disease after cure was, to ordinary observation, fairly completed. Psychological experiments, the object of which does not readily appear to the patient, may easily be adapted to detect cases of simulation. It may be hoped, too, that in course of time the difficulties of differential diagnosis may be diminished by the minute study of the mental condition in different types of insanity.

The power of diagnosis seems to be in large measure a gift, born in a man, not to be acquired in its completeness by study, nor transmitted from master to pupil. The introduction of special methods into medicine has tended to place reliable means of diagnosis in the hands of those who are less gifted by nature in this

direction, and we may hope by the introduction of similar methods into psychiatry, that while the great diagnostician will never be supplanted, yet identification of the disease may become more nearly a matter of routine.

One cannot tell beforehand how much may be accomplished in these different ways by the attempt to utilize psychological experiment in psychiatry. It is seldom that an investigator can be sure beforehand of the value and significance of his results. But we have good precedents for expecting results from such a combination of two sciences. Within our own time, the combination of physics and chemistry, in the investigations of a certain few men, has had enormous results, has established practically a new science, which has reacted most beneficially on the two sciences from which it sprang. Even so we may reasonably expect that the cross-fertilization of psychology by psychiatry and of psychiatry by psychology will result in a vigorous offshoot, a credit to our two sciences, a bond which shall replace their former isolation, and a source of great enlightenment to both.

MENTAL DEGRADATION THE RESULT OF ALCOHOL.

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Short of actual death in the family, insanity is probably the condition which causes the greatest amount of consternation and terror, if not actual misery. It is of all diseases the most far-reaching in its effects and has been truly described in most cases as a living death. It is capable of turning the most joyous and happy homes into abodes of deep despair. It disfranchises the sufferer, curtails his liberty, separates him from home and friends, disqualifies him from all social functions, indeed it not only deprives him of his civil, social, financial, political, and domestic rights, but also in most cases compels his associating with others of the same class in houses or institutions in which he is compulsorily detained against his will, and which reveal to him scenes of suffering and distress of which hitherto he had never even dreamt and to which he often feels he can never become accustomed.

On January 1, 1905, there were 119,829 insane persons in England and Wales, of whom 55,169 were males and 64,660 females, being a proportion of one insane person to every 285 of the population. Of this number 109,277 persons (50,180 males and 59,097 females) were of the poorer classes.

It is no easy matter to determine with exactness the cause of any disease, but in respect to mental disease this becomes a task of extreme difficulty, as no definite facts of causation are vouchsafed, the information usually obtained being some antecedents in the history of the patient which are considered by his friends to bear some relation to the attack of insanity, and those which stand in more immediate relation to it being given the greatest prominence as factors of causation.

Underlying the causes ascertained is often some inherited or acquired frailty of the brain tissue which renders the individual more prone to be affected by noxious circumstances or conditions

which in the healthy would have less influence. Although several antecedents may take a share in the ultimate production of insanity one of the causes of the impaired resistance in the nervous system may also be the agent immediately responsible for the fully developed disease.

It is interesting to note when statistics as to the causation of insanity are taken over a period of years that the number of cases appearing as caused under the different headings show but little variation from year to year.

It is computed with some certainty that alcoholic intemperance may be attributed as an assigned cause of insanity in 22.7 per cent of all the male admissions into asylums and in 9.4 per cent of the females: the proportion for private patients being 16.7 per cent for males, and 8.6 per cent for females, and for pauper patients 23.6 for males, and 9.6 for females, showing the lesser resistance to temptation among the poorer classes.

It is fair to state, however, that intemperance is often an effect, as well as a cause, of brain weakness or disease, and the intermingling of these antecedents renders it impossible to arrive at precise conclusions as to causation, but the Lunacy Commissioners in their last report, dated 1905, to the Lord Chancellor—issued as a Blue Book—acknowledge that "alcohol is a brain poison." It is interesting to note as pointed out in this report that certain counties with a comparatively low rate of insanity show a high proportion of cases admitted with a history of intemperance; that counties with a high rate of insanity have a low proportion of cases from alcoholic intemperance and that areas in which the association of intemperance and insanity exists correspond with those areas in which intemperance and crime also prevail.

Dr. Bevan Lewis recently referred to the geographical incidence of alcoholism, and pointed out that the industrial people in coast counties were the most intemperate, but had the lowest ratios of pauperism and insanity; whilst inland agricultural people were the least inebriate, but had the highest ratio of pauperism and insanity. This apparent dissociation between alcoholism and insanity is a complex question, for pauperism, want, anxiety, and other moral factors are essentially related to both insanity and drink.

I am convinced that the great question of the effects of alcohol

upon the human organism is primarily one for the medical profession, for intemperance has in numerous instances been initiated through misapprehension of medical advice in regard to the use of stimulants; and secondly, the question of the use of alcohol is a sociological one. The causes of drinking are so many and so infinitely varied that great caution is required before accurate conclusions in regard to them can be arrived at.

We hear a great deal about lowered vitality, about the craving for luxuries and excitement, and about alcohol in any shape and form being a poison that many facts are distorted by fanatical enthusiasts who are too apt to indulge in hasty generalizations and in severe condemnation of those temperate people who themselves are endeavoring to the best of their ability to prevent the spread of excessive drinking and to educate the public in regard to the evils which must follow and how these may be mitigated.

The profession of which I am a member, has, I venture to think, within recent years, done more than any other to fix attention upon the evil effects of intemperance, and a proof of this statement is the petition presented a little over a year ago to the Board of Education, signed by 15,000 medical men, asking for fuller and more correct information about the physiological effects of alcohol to be taught to children in our public elementary schools.

There is no question of public interest that is in greater need of being studied by sober-minded individuals than this question of drink, and in a country in which every attempt is now being made to educate the masses it should not be forgotten that the elevation of the individual out of the sphere into which he was born may impose a tax upon his nervous system which may eventually expose him to serious temptations. The frequency with which neuroses and psychoses—diseases of the nervous system and affections of the mind—are met with in families in which there has been a sudden and rapid change in the environment—for example, the removal from a country to a city life, or from comparative straits to comparative affluence—is a factor of great importance and it has not received the consideration it needs. Addiction to alcohol is an indication of a functionally unstable nervous system, and under the stress of the conditions created by modern civilization, many individuals whilst attempt-

ing, as they suppose, to better their condition in the social organization are thrown out of sympathy with their surroundings and become subject to excessive nervous strain—drinking being the phase presented of this general and mental instability.

Now it is a fundamental law in evolution and dissolution that the last, most complicated and highest developed function is the first to go in disease. The highest faculties of man are the attention, intellectual discrimination, and judgment. Upon these alcohol exerts a degrading and degenerating influence. It is upon the highest mental faculties upon beliefs, ideals, ambitions, and desires that conduct depends, and there is no fear of exaggeration when the statement is made that the greater part of *delinquency* or crime and numerous other social calamities—sins of omission as well as of commission—result from excessive alcoholic indulgence. Indeed the gradual non-observance of the three C's "Ceremony, Courtesy, and Convention," and their replacement by the three P's "*Persiflage, Paradox, and Pruriency*" demonstrate the effects of alcohol upon conduct which through its effects gradually deteriorates until the most complete ethic degeneration eventually results. Not only in delinquency but also in innate criminality does alcohol exercise a *genetic* power. Crimes due to alcohol have in Germany reached the figure of 41.7 per cent of the total crimes. In France delinquency has also risen to 45 per cent where the consumption of alcohol has increased, a corresponding diminution having occurred during those years in which the vine crops were very bad. In Hungary delinquency through alcohol has reached to 35 per cent of total crimes, in Norway to 44.4, and in the districts surrounding St. Petersburg to 47 per cent. In our own country 50 per cent of crime is attributed to the abuse of alcohol.

The question "what is the recognized effect of drink on crime" is closely related to our present subject, and it was asked at the International Penitentiary Congress at Brussels in 1900 and was subsequently reconsidered at the Congress at Buda-Pesth in September of last year. At this Congress 28 States were represented by 82 official delegates and the number of *adherents* was 335. The subjects treated by the Congress embraced the problems of penal policy, especially the deprivation of liberty with reference to the prevention of crime. Punishment comprehends the whole

study of man, it enters into the so-called "factors" of crime, moral, social, and economic.

Preventive measures, education, religious training, means for repressing drink, were all considered by the Congress. It was shown by Dr. Legrain, of Paris, that a high percentage of offences committed were either the direct or indirect consequence of drink. Dr. Masoin, of Belgium, in a careful analysis of cases of grave crime estimated that 44 per cent were habitual drunkards and of these 11 per cent were drunk at the moment of crime. Of those sentenced to capital punishment over 50 per cent. were addicted to alcohol. The further examination of 5000 cases from the Central Prison of France showed 66 per cent of crimes as a result of alcohol. Crimes of violence were particularly connected with drink, the proportion of these reaching the high percentage of 83 of total crimes. It was also pointed out that the usual police court recidivists had a proportion of 77 per cent of habitual drunkards. The Congress considered idleness or the absence of some trade or calling to be an important contributory factor to crime, and as a result of deliberation the Brussels Congress recommended that the deleterious effects of alcohol upon the bodily organs should be illustrated by lectures and pictures. As a result, pictorial emblems vividly representing the harm of drink have been placed in the corridors and rooms of the various prisons. It is even suggested that these pictures should be of a terrifying description so as to force conviction upon the minds of the most callous and indifferent. Such exhibitions occur in prisons in France, Belgium, and America. As a further precautionary measure and owing to the overwhelming demonstration of statistics respecting Zurich, Berlin, and Vienna the great proportion (33 to 4) of offences resulting from drink were perpetrated on Saturday, Sunday, and Monday as compared with the other days of the week; these being the result of wages spent on alcohol and owing primarily to idleness. In consequence the Congress at Buda-Pesth last September voted, among other measures, in favor of special restraints being placed upon the sale of drink from Saturday to Monday, and they were most decidedly in favor of "anti-alcoholic instruction" in prison, by lectures, pictures, and diagrams.

The mental development of these cases who, through drink,

become the inmates of prisons, workhouses, and asylums is not of a high grade, and of those who are received into the State reformatories 10 per cent are subsequently certified into asylums, 70 per cent are on the borderland between sanity and insanity, whereas 20 per cent are described as vicious. Up to the end of March, 1904, 937 women and 144 men were convicted under the Inebriates Act, of whom 70 of the former and 36 of the latter were transferred to State control as too refractory and violent for the ordinary certified reformatories. The mental condition of these is described as morally as well as intellectually depraved, being unfit to associate with decent human beings. No amount of persuasion can keep them from drink. They must have it even if it pauperizes them and makes them (where of good social status) the companions of low persons and criminals—even if their families are ruined by their self-indulgence. Nevertheless if these people can be approached young, before these habits are formed and fixed, they are not such hopeless material. We ourselves are convinced of the value of educating the young, of instilling into their mind and of burning deep into their consciences the associations of idleness, disease, drink, and crime, and we shall refer to this aspect later.

As to idleness, Ruskin states, "It is only by labor that thought can be made healthy, and it is only by thought that labor can be made happy."

Now what are the effects of alcohol upon living protoplasm?

These have been carefully studied by competent observers, and the literature of the subject is full and extensive. Alcohol stops the germination of spores and grain, and it is even fatal to its own production, for when the proportion of alcohol exceeds 20 per cent in the material undergoing fermentation, further action of the ferment is arrested. The effect of alcohol upon protoplasm is to paralyze irritability, diminish sensibility, and impair contractility.

We have the record of innumerable experiments and irrefutable evidence of the evil influence of alcohol upon the *metabolic*, the *motile*, and the reproductive functions in all animal cells.

Physiology teaches us that alcohol is a strong de-hydrating agent. It takes away water from living matter and as a fixed amount of water is a necessity for the life of healthy protoplasm

this de-hydrating action of alcohol must prove to be highly injurious to life. Alcohol passes with difficulty through the living membrane of the small capillary blood-vessels into the tissues, it acts upon the delicate cells as an irritant and causes the capillary walls to thicken, the thickened wall encroaches upon the minute tube-cavity of the blood-vessels, and as a result the special organs of the body are deprived of their necessary nutriment.

This condition of the blood-vessels, furthermore, retards the excretion of waste material from the tissues which in consequence accumulates and interferes with healthy and normal functions; and it is this accumulation of effete material which should be eliminated, that has given rise to the view that the injury from alcohol is not only a direct poisoning but also an indirect one, from the production and accumulation of waste products which cannot in this way be got rid of.

Physiological Effects.—Bevan Lewis states that alcohol in small doses causes an initial stage of increased blood-pressure with decreased heat production. This is followed by a stage of decreased blood-pressure together with increased heat production as well as a great heat discharge. Coffee and tea are stated by Bevan Lewis to act differently, for heat formation was stimulated from the first as well as heat retention. The continued use of alcohol brings about, even in what is called moderate drinking, marked changes in the nervous, muscular, and glandular tissues. The action of alcohol is a structural one, and change of structure implies change of function.

In large doses it has been proved to cause changes in the pyramidal cells of the brain. It destroys the fine tissues of these cells, which swell up from degenerative changes, their outline being altered and the nucleus displaced or extruded. Fatty changes are produced in the voluntary and involuntary muscle fibres, in the various gland cells which in consequence alter the *metabolism* of the organism.

An increase takes place in the baser tissues, and the fibrous or cicatricial elements multiply both in the blood-vessels and in the various secreting glands so that malnutrition is induced which reduces vigor and diminishes vitality, resulting in a lowered resistance to disease. As to the increase of fat in the body, the statement is not maintained that alcohol itself is consumed to

supply the energy which is naturally obtained from tissue changes.

Alcohol exercises no "protective oxidation" over the body: on the contrary, it interferes with the building-up process by forming a compound with the hæmoglobin of the red blood corpuscles, which takes up and parts with oxygen less readily than does normal hæmoglobin.

The accumulation of fat noticed in beer drinkers is due to a general diminution in the *metabolism* of the body, and to an accumulation of waste matter which should be excreted. This accumulation of fat is in part an active degeneration as well as an infiltration, and it can be proved to be at the expense of the higher protoplasm, as it can be measured by the increased elimination of nitrogen. Fatty infiltration and fatty degeneration are characteristic features of acute alcoholic poisoning which when present explain why injuries and bodily illness which do not cause death in abstainers are prone to be so fatal in alcoholic subjects.

Mental Effects.—The mental effects of alcohol differ as to whether they are induced by a small dose, or by one large dose—as occurs in acute drunkenness or acute alcoholic poisoning—or as they are the result of long-continued chronic drinking, even when this is done in what is described as "moderation." The effect of ordinary convivial drinking, often described as that of moderation, and often manifested in commencing intoxication, is that the ideas flow with unaccustomed facility the tongue is loosened and the person becomes more loquacious: language becomes more expansive and confiding, cares vanish, everything seems more full of attraction and all the world seems better! There is a sense of bien-être,—the person is made happier, he is less diffident and more self-assured, his visage is seen to be illumined and his eye is kindled. But this picture soon falls into shadow, for the ideas soon become dissociated and words become a vertiginous whirl. This dissociation is one of the most marked symptoms in the stage of intoxication. The various sensations pour their messages into the cerebral cortex, and the highest focussing power of the mind is unable to concentrate them: each makes its separate impression and confusion results which is evidenced in the stupid and silly nonsense of the conversation.

The initial flush of intellectual exaltation and excitement referred to has no relation or bearing to genius, it is merely a suspension or an inhibition of the highest psychic faculties which permits the next highest to rise up into prominence.

Alcohol sets free the shackles of restraint characteristic of the higher man, removes the veil from the less highly evolved mental plane so that free play is given to the uncontrolled feelings of the lower man. Alcohol attacks first the hierarchy of the nervous functions, viz., those which are in the front rank, and these are affected in the inverse order of the development, those last formed being, as already stated the first to surrender. There is a loss of prevision and judgment and there is a failure in the power of focussing or concentrating the powers of the mind. The mind loses these characters in the order of their importance, the highest and most important disappearing first. After a time the memory becomes affected and there is a tendency to the development of illusions upon which are based delusions, mainly those of a persecutory nature, such being extremely common in those who drink to excess. Indeed it is not too much to say that where hallucinations or delusions are present in cases of insanity, and when these are of a terrifying, fearful or persecutory nature they supply a reasonable suggestion for an alcoholic origin. One's experience can go further and record the fact that when visual illusions are present, or delusions based upon them, or when the delusions are boastful, vainglorious and grandiose, then alcohol may be directly or indirectly the cause. One of the most frequent symptoms of mental disturbance caused by chronic indulgence in alcohol is a loss of memory: the nouns go before adjectives and proper names first, so that language becomes poor, primitive, and lacks precision, and such is most marked in persons who have taken to alcohol late in life before they became accustomed to the action of the poison and toleration was established. A change in the disposition from what it was before to querulousness and impulsiveness is also very marked as the result of chronic drinking. There is a tendency to the development of a hostile attitude of mind and to react intolerantly and furiously, the person becoming aggressive, violent, and threatening, indeed the uncontrollable fury and violence in some cases after alcohol resemble more that of epilepsy than any other disease. The

benevolent emotions suffer especially, and altruism gives way to the most selfish egoism: prudence and moderation disappear and the mind eventually becomes a listless and disorderly chaos, without purpose and without method.

Sensory Effects.—What are the sensory effects of alcohol? Alcohol blurs and dulls the sensibility, giving rise to loss of feeling in the extremities and when common sensation is affected nervous cramp often occurs. In consequence of these, mistaken ideas are aroused and complaints made as to electricity, machines, or the gnawing effects of animals. It is these sensory disturbances which often originate delusions of persecution and violent retaliation on the part of both sexes.

Women are more prone to these disturbances and to anomalies of sensation than men, and the grocer's license is probably responsible for more women being in asylums than ever the publicans license, as drinking in the one case is done openly and to some extent is controlled by public opinion, whilst in the other it is accompanied by deception, stealth, and lying.

Motor Effects.—Alcohol has a peculiar affinity for that part of the brain which is connected with the "muscular sense"—a sense which interprets the equilibrium of the upright position and that of the limbs. Even before ordinary sensation is affected the "muscular sense" is often attacked. At present not very much is known of the muscular element of thought, but the sense of distance, the feeling of solidity, of perspective, and of weight: also the delicate so-called "touch" required for fine mechanical work is essentially based upon the muscular sense, and alcohol is destructive to this, even in continued small doses. Mechanics, such as engineers, watch-makers, instrument-makers, even clerks and those who are dependent for their living upon a highly cultured and educated muscular sense are brought into asylums, and it is among the skilled craftsmen, the best workers, that alcohol plays its worst havoc: and consequent distress is not limited to themselves for it involves those dependent upon them, who are frequently pauperized through their incapacity. It is inevitable that those who drink should suffer from tremors, and these occur in the muscles most used being evident even to the layman in the trembling lips, hands, and voice of those who indulge in alcohol.

General Susceptibility to Alcohol.—It is a true maxim that

"What is one man's meat is another man's poison." Drink in small doses is literally death to some persons, whereas others tolerate it in larger quantities. Those who have suffered from head injuries are especially prone to its ravages, and the brain worker rather than the manual laborer suffers the most, in fact, the stress upon a particular organ often determines the seat of least resistance to alcohol. As already stated, alcohol has a special affinity for the nervous system, although other organs suffer as well, for it frequently causes death through disease of the great glands of the system, *e. g.*, the liver and kidneys. The heart also and the great blood-vessels may be affected, death resulting from apoplexy, cerebral softening, or general arteriosclerosis. The determination of the organ attacked depends much upon the family tendency in the individual, and it is well known that there is for each person a *locus resistentiae minoris* which tests the strength of the chain in its weakest link. This is well exemplified in our own experience when we find one person becoming garrulous and silly under the influence of alcohol, another irritable, aggressive, and noisy, whereas in a third the muscular system becomes mostly affected as is evidenced by the utter inability to stand or move although the same amount of the same form of alcohol has been partaken by each.

Further, through the unbridling of the *inhibition*, alcohol impels to other forms of indulgence, and many are the cases of rapidly progressive and fatal insanity, termed general paralysis, which are admitted into asylums, primarily the result of a deficient self-restraint, and of a sudden and passionate yielding to temptation. Children and young people are more susceptible than the old, upon whom alcohol in small doses has the least deleterious and the greatest therapeutic effects.

This susceptibility of persons to the effects of alcohol is the "personal equation" of the individual as it has been called, and it is a dominant factor in the incidence to or immunity from other diseases also.

One word may be said here about the vexed question of heredity, and whatever view is accepted as to the transmissibility of acquired character all must be agreed that the delicate material of growth is unavoidably affected by intemperance. The chil-

dren of drunken parents are themselves feeble apart from the neglect of offspring involved.

The tendency to convulsive forms of mental diseases such as epilepsy chorea, and hysteria, when the father is a drunkard, and to the more degenerate forms characterized by idiocy, imbecility, and dementia and the criminal type may be looked upon as established facts.

General Results of Alcohol.—It is difficult to state whether any special form of alcohol produces any particular effect, but there is no doubt in my mind that the deleterious effects may be combined from the category of mixed poison represented in the different alcohols. Beer drinkers get dull and demented whereas spirit drinkers are more often cunning and suspicious. Such poisons as absinthe must exercise a hurtful influence quite apart from the effects of the alcohol served with it. The cheap spirits, whether called "whiskey" or "Australian brandy," variously manufactured from maize, molasses, rice, or potatoes, or even from the destructive distillation of wood, produce very injurious effects. We know that the quantities of beer drunk by the poorer class cause considerable malnutrition from the fermentation inducing gastric catarrh. All are acquainted with the wasting, dropsy, and lowered vitality brought about by spirit drinking, which hardens and destroys the fine mucus membrane of the alimentary tract and the various serviceable glands whose secretions pour through it. In this connection may also be pointed out the tendency there is in drinkers to die from consumption, and many drinkers take the infection in the different bar parlors, where expectoration and other dirty habits are seen. We know the evil effects of alcohol in the subjects of surgical operation, also by the death that take place from slight wounds in confirmed beer drinkers. The statistics of insurance societies all tell the same story of the "bad lives" of drinkers as against the "good lives" of abstainers, which is an irrefutable and overwhelming testimony against alcohol. Of all the evil results of alcoholic intemperance the most sad and far-reaching is insanity, and the statistics of the asylums of London tell a gruesome story in this connection. Since the opening of Claybury Asylum, in 1893, now nearly 13 years ago, the statistics of the first 12 years show that out of the 10,688 persons (4739 males, 5949 females) who have been re-

ceived into this asylum, no less than 1057 males and 742 females have been admitted through drink, as an exciting or predisposing cause of their insanity, a proportion of 17 per cent of the total, or 22 per cent of the men and 12 per cent of the women. During this period a total of 43,694 persons have been admitted into all the asylums of London of whom 7182 persons, viz., 16 per cent were definitely ascertained to be through drink.

When we consider the misery and degradation of the individuals themselves and the privation and poverty of those dependent upon them, also the economic aspect of losing the work and usefulness of 7182 persons, mostly men and women in the prime of life, and to feel that there has been the further burden of their maintenance through the rates, upon the more sober and industrious section of the community who are thus compelled to keep these persons—most of them for the rest of their natural lives, this aspect alone of the drink question may well cause us to pause and wonder what we can do to promote temperance.

Remedies.—This paper would not be complete without some few remedial hints, although such was not originally intended. The picture is so sad that an effort should be made to reconstruct our social scheme in this particular. We, as medical men have now abandoned the maxim of "the survival of the fittest" for "fitting the many to survive." There is only a certain limited amount of force and therefore of work in the world, but we can raise the potentiality of this by improving the individual as a working unit. If we can produce a favorable environment we can improve the unit and may thus counteract some of the inherited frailties, vices of organization as they are termed, and in this way we can remove some fertile causes of drink.

In all the affairs of life, conduct counts for much and "example is always better than precept." The impressions given to the young by example and by social usage, instruction as to the evil effects of alcohol, the value of clean lives, the care that should be exercised by everyone to keep his life and person clean—the pleasure of open-air living, the importance of fresh air and light, of good food, and how to select and cook it to the best advantage—all these are inestimable auxiliaries in the cause of temperance. Increased facilities for healthy outdoor exercises and recreation, such as bicycling, and the controlling factor of

public opinion as to the value of temperance in all things, also assist the cause of temperance. Man is a gregarious animal and the conscious self is greatly influenced by the opinion of others. I have therefore great faith in "communal vigilance" and I believe in the enrolling of postulants in the cause of temperance, which encourages the feeling of brotherhood and that we are not alone in the cause. This community of purpose and effect helps to raise our cause to a creed and to encourage the enlisting of further recruits. It is for this reason that I believe in temperance clubs, bands of hope, and all such associations where children are taught to look upon drunkenness as "bad form" and a vice, and to despise it as well as the drunkard: where a healthy public opinion is formed among themselves and where each member is pledged to self-respect and sobriety. To teach the young how to become good citizens, that life has its duties as well as its privileges and rights is to teach temperance. I also believe in lectures such as are held by our diocesan authorities and by the various agencies united in the temperance cause. Further, I believe in the united action of all these agencies, so that pressure may be brought to bear upon the legislature to raise the health and vigor of the people and to lessen disease and mortality through the action of alcohol.

The legislature, usually blind and deaf when no political interests are at stake, but ready to pass academic and non-committee resolutions as to the value of "local option" in some of the colonies, has, nevertheless, by the Inebriates Act of 1898, extended in 1903, emphatically come to our aid by enabling the police court authorities to send to certified reformatories, and by the Secretary of State's order to state reformatories, those characters who disgrace our streets and contaminate our youth. Until this period, these persons, through a long life of debauch, immorality, violence, and crime, gave constant trouble to the police in the streets and to prison authorities when detained, during their innumerable penal sentences; and for them prison discipline in state reformatories for long periods is the only adequate treatment. Whether cure ever occurs in these reformatories is another matter, but the exhibition of this form of vice in our streets is thus done away with, and we are free to direct our attention to a more hopeful field, viz., the rising generation, in whose interests

and that of morality, we earnestly appeal for a more vigorous control of the drink traffic and for power to diminish the facilities for obtaining it which glare with specious temptation at nearly every street corner.

A REVIEW OF THE MENTAL SYMPTOMS ACCOMPANYING APOPLEXY.

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Very little attention has been given to the study of the mental symptoms preceding, accompanying or following an apoplectic attack and in the majority of works on nervous diseases little is to be found on the subject and what is written is often vague, indefinite and frequently apparently based on very imperfect observations. In a great measure this is due to the fact that in the majority of cases the symptoms pass unobserved or, if of sufficient intensity to attract attention, are looked upon simply as accidents. The causes of the lack of detailed observations of these symptoms are not only the fact that the early cases are seen by the general practitioner or neurologist who has not had sufficient training in psychiatry to recognize any but the most obvious deviation from the normal, but also to the lack of interest in any but the physical manifestations present. Too often the symptoms are not continuous but may occur at varying intervals of time and be seen by different men who have no way of comparing notes. In this way many valuable points are lost. In very few cases are prodromal symptoms, even when observed, given the important place they deserve in the light of subsequent events. Very few cases are on record in which the prodromal and post-apoplectic symptoms are placed in sequence.

The psychic alterations in apoplexy are the most varied of all those resulting from definite organic derangements of the brain, if we except possibly brain-tumor. The psychopathic alterations are not determined apparently, as far as observations which have been recorded show, either in degree of intensity, duration or character by any definite anatomo-pathologic process. The psychologic reactions after apoplexy depend as much on the former condition of the nerve cells as on the superadded lesion.

Many cases of hemorrhage and thrombosis show no symptoms of mental derangement on superficial examination, but practically every case will, on careful investigation, show an alteration in the thought processes. Disturbances in the psychic sphere are almost always associated with sensory and motor changes, but while the latter are usually the direct effect of the lesions, the pathogenesis of the former seems comparable to that of epilepsies and toxic paralyses, in which a diffuse morbid impregnation of the cortex provokes localized reactions (Dupré).

In practically every case of hemorrhage or softening there is an underlying arterio-sclerotic condition of the vessels of the brain which is the cause of various nutritive disturbances and gives rise to the prodromal and many of the succeeding symptoms. There is no pathognomonic difference between the early symptoms of hemorrhage and of softening. Benon found that the intellectual disturbances were practically the same in right as in left hemiplegics—51.5 per cent for right, 48.9 per cent for left.

The etiological factors most often noted were alcoholism and syphilis. Benon, in 392 hemiplegics in the Asile de Maison Blanche and the Asile Clinque, obtained a history of alcoholism in 11 per cent and of syphilis in 5 per cent. Heredity was noted only in four cases, but he states that this figure is probably too low.

The prodromal symptoms in the great majority of cases pass unnoticed. They are essentially arterio-sclerotic in origin and may be present for several months before the stroke. Rostan notes them as constant in softening. Durand-Fardel notes them in half the cases of softening and a little less than half the cases of hemorrhage. They may be divided into two groups, the disturbances of motility and psychic disturbances. Lwoff states that at a period, of greater or less duration, before the lesion is established one notes transient, partial feebleness and paralytic phenomena in different parts of the body. The patients often complain of tingling in the ends of the fingers, of neuralgias, of diffuse or localized cephalalgias. Often there is a glare of light or a mist before the eyes. More often yet there is a whistling or humming in the ears. Disturbances of smell and taste are rare.

The prodromal psychic troubles are usually partial and intermittent and are extremely variable. Generally some months or weeks

before the attack there are periods of partial amnesia, the patient becoming absent-minded, forgetting to put on various articles of clothing, to carry out commissions, etc. The patients suffer an unaccustomed distraction. They err greatly in their calculations and make great mistakes in the letters which they write. They are incapable of any sustained effort. Often there is a diminution in the faculty of judgment, patients sustaining the most unjust causes with puerile and ridiculous reasons. The character undergoes great modifications, the patients becoming distrustful, suspicious, irritable, agitated, then suddenly sad, depressed, apathetic, indifferent, they lose interest in their friends and family. They may become quite emotional and laugh and cry with hardly any provocation. According to Starr it is common for these symptoms to be associated with headache and to be of a temporary character passing away with the pain. Very often the patients have a clear insight into their condition and bewail the fact that they are unable to remember events, to perform various tasks or to control their emotions. True delirious ideas sometimes appear; most often they are melancholic in tone, or are ideas of persecution which remain for a longer or shorter period.

Savage has reported a case in which there were pronounced, prodromal, persecutory ideas. A man, æt. 55, when first seen was suffering from sleeplessness, some neuralgic pains fixing themselves chiefly in the eyeballs. About the same time he became irritable, and his servants were constantly being changed. He became emotional and his memory failed. After these symptoms had existed for several weeks, the sleeplessness continuing, hallucinations of hearing became marked, so that on several occasions he got up at night believing that a bell had rung, and his wife was unable to convince him of the contrary. These hallucinations troubled him mostly at night in the way of bell ringing, but during the day he had other annoyances which he said were due to his unusual keenness of hearing, so that he declared that he could hear his servants talking in the kitchen, which was impossible. A change of scenery benefited him for a time but on his return home he very soon relapsed into his former condition.

After a time he became somewhat better, he was less emotional and irritable and slept better, but he was loquacious and was excessively fond of talking of his own worries and ailments. His

memory remained impaired. He now developed hallucinations of smell, he said that there was always a smell of smoke in the house. He said that not only was his nose affected, but that his eyes smarted and were uneasy in consequence of the alleged smoke which he smelled. He also had the same hallucinations in the houses of friends whom he visited and said that these odors were caused especially to annoy him. During the whole of this time he was losing flesh and becoming weaker. The symptoms continued and one day he had an apoplectic fit, affecting the left side. The convulsions were severe and he died within the week. Savage attributes all these symptoms to malnutrition of the brain caused by atheromatous changes in the vessels.

It is frequently a matter of popular observation and comment that apoplectics have for some time, varying in duration, prior to the attack not only appeared more active both mentally and physically, but have expressed themselves as feeling unusually well and vigorous.

The period of the attack is usually initiated by an apoplectic seizure with the phenomona which characterize it. Often, however, it happens that the cerebral lesion is announced only by a temporary dulling of consciousness, an inability to think, to remember, to fix the attention together with great emotional excitement and lack of control and a feeling of heaviness in the limbs. Starr (*Medical Record*, 1897), notes a number of cases in which the classical symptoms of apoplexy were absent. After recovery from the shock of the stroke various phenomena may be present, either singly or alternating. They are excitation, depression, and mental confusion.

Excitation is the most common, 63.85 per cent (Benon). Sometimes there is a true maniacal excitement with paroxysms, especially nocturnal. It is manifested by words and incoherent acts. The patient cries, swears, utters obscene words, throws himself from his bed, runs about the room, behaving somewhat as a somnambulist. The cases of intense maniacal excitement are relatively rare. Benon noted them in 3.5 per cent of his cases. As a rule they are rather in a state of turbulence than excitement.

Benon noted depression in 11.48 per cent of his cases. These patients are apathetic, silent, depressed. They will not respond

to questions or only in monosyllables. The face expresses sadness and pain. Often they refuse nourishment.

Mental confusion was noted in 22.96 per cent of the cases. The interrogatory shows an obnubilation of consciousness generally well marked. The patient is entirely disoriented as to time. The various aphasic phenomena such as word deafness, word blindness and paraphasia, due to the breaking of the association tracts, must be carefully excluded before a diagnosis of mental confusion is made. These aphasic symptoms sometimes confuse the condition of mental confusion.

With some hemiplegics these states alternate. Benon noted the alteration of excitement and confusion in 7.84 per cent of his cases, of excitement and depression in 2.8 per cent, and of depression and confusion in 0.84 per cent.

The fundamental mental state of this period is characterized by a partial enfeeblement of intelligence, which is found in all these cases, whatever be the accessory symptoms presented by the delirious ideas. This enfeeblement is shown by the lowering of the intellectual faculties as well as the affective, moral and voluntary faculties. Memory defects are found in all cases. The fixation or the power of conservation of new facts is especially affected, anterograde amnesia, which may sometimes become progressive anterograde according to the laws of Ribot. This enfeeblement of the power of fixation can also be seen in the prodromal period, where it is manifested at intervals bearing on some isolated acts or facts. After the lesion is established the enfeeblement is considerable and one can observe the phenomenon of *vie complète dans le passé,* a phenomenon which is evidently related to a diminution of perception and attention. The power of localization in the past, the third element of memory, is also more or less disturbed. These memory defects can remain stationary for a long time.

In Benon's cases insight was completely lost in 30.8 per cent. In 69.19 per cent it was in part preserved. This conservation of conscience of psychic enfeeblement is one of the characteristics of the mental state of patients with circumscribed lesions of the brain, especially of hemiplegics with hemorrhagic foci.

Spontaneous attention is little altered. Voluntary attention, according to Lwoff, is not entirely lost but is in reality in a latent

condition. Benon states that attempts to fix the attention are frequently followed by headache, vertigo, and a sense of inability leading to anguish. Usually, if not always, the ideational activity is diminished. The association of ideas is poor, spontaneity and psychic initiative are diminished. Modifications in the judgment and reason are more or less profound. In general there is a certain state of inferiority by defect of the *critique*. The content of ideas is diminished.

Modifications of character are almost constant in organic hemiplegics. The normal affection for his friends and relatives is preserved, but if one regards it closely it is discovered to be connected with an exaggeration of the egoism of the hemiplegic who shows most vividly the affection for persons, who in visiting him bring him sweets, inspire him with hope and aid him to support his troubles. Altogether the egoistic sentiments common to all chronic invalids, is in the hemiplegic exaggerated at the expense of the altruistic.

The *emotivité* of the hemiplegic, if it is at first a logical and conscious *vis-a-vis* of his true state, is always increased by the pathological change, shown by a surprising tendency to tears, which in time becomes automatically periodic even without extrinsic motives sufficient to explain them. Among the emotional hemiplegics Benon found 8.96 per cent right-sided and 10.09 per cent left-sided. *Hyper-emotivité* alternates with *hypo-emotivité*. *Hyper-emotivité* is characterized by the appearance of desires and caprices. The patients become vindictive, irritable, egoistic, or morose, somber and reticent, or they weep and lament. *Hypo-emotivité* is distinguished by profound apathy, the patient sees his family with indifference, complains of nothing, has no desires or regrets. Contrary to the most frequent cases of psychical enfeeblement which are encountered with the hemiplegics who scorn almost every attempt at psychomotor reaction, there are some in whom a persistent irritability and intolerance of their destiny leads to the loss of the instinct of self-preservation, so much has existence become painful and insupportable to them.

The will undergoes a diminution proportional to the affective and moral hypotonia. The moral sense is often disturbed, while the religious sentiment is highly developed, often exaggerated,

even in those patients in whom the other modes of psychic activity are enfeebled.

Delirious states usually follow soon after the apoplectic attack. The delirious ideas are ordinarily polymorphous, mobile, confused, that is, they have the characteristics of delirious ideas appearing on a demented foundation. Persecutory ideas occurred in 24.1 per cent of Benon's cases. Generally these are confused ideas of persecution of affective or amnesic origin. Occasionally they may be systematized. They are almost always accompanied by delirious interpretations or hallucinations. Melancholic ideas occurred in 15.2 per cent of the cases. They vary from simple sadness with depression to a hallucinatory delirium with ideas of and attempts at suicide. Grandiose ideas occurred in 4.22 per cent of the cases. They are variable, multiple, fleeting, diffuse, not of great extent and are usually of short duration.

According to Lwoff, maniacal excitement with or without delirious ideas, is the most frequent occurrence after the attack. The patient does not sleep, rolls about in bed and utters cries. Later when he begins to walk he gets up in the night and walks about, is liable to set fire to anything, goes out of the house entirely nude. This agitation is not always continuous and is often worse at night.

Erotic ideas, ideas of marriage, especially in elderly patients, and obsessions are occasionally seen.

Hallucinations of sight, hearing and general sensibility frequently accompany the delirious ideas. Hallucinations of taste and smell are more rare. The hallucinations are especially of a painful nature, the patients see phantoms, ghosts, fearful animals and persons, they hear outrageous thing said about them, hear vulgar expressions, sometimes they hold conversations with their relatives or with imaginary friends. These hallucinations occur especially in the evening. They sometimes occur in the first part of the night or in the middle of the night, rarely in the latter part or in the day. The hallucinations are not continuous. They disappear for some hours in order to reappear under the probable influence of the circulatory changes which are produced in the neighborhood of the lesion (Lwoff). Unilateral auditory hallucinations have been noted. Hallucinations of the general sensibility are sometimes located on the hemiplegic side.

The combination of hallucinations with excitation or depression, the change of humor, the confusion of ideas, the fears, the conversations which the patient holds with imaginary beings form an *ensemble* which can best be designated by the term hallucinatory delirium, which can be of an expansive or depressive nature. This hallucinatory delirium is characterized by an agitation or depression, multiple hallucinations of hearing and sight, unreasonable acts, confusion of ideas, obnubilation of conscience, impulsive acts, delirious ideas of persecution, melancholia or grandeur; it is acute and closely follows the attack; it is generally transitory and is followed by a simple enfeeblement of the intelligence with alternate periods of excitation and depression. Sometimes in this enfeeblement one finds delirious ideas which can be joined together and take the appearance of a systematized delirium.

The enfeeblement of intelligence is far from being always parallel to the motor disturbance. The mental faculties can remain partially enfeebled up to death. Very often, nevertheless, the mental deterioration is very rapid and the individual is soon reduced to an almost vegetative life. As a rule the mental disturbances are not well established until after a second or third attack.

The prognosis depends on the cause of the lesion, its extent, its nature and the age of the patient. Softening, which destroys the nerve fibers, is graver than hemorrhage, which pushes them apart. This is the reason why in subjects with hemorrhage the psychic functions, memory in particular, and the general disposition of character undergoes an alteration less durable than in subjects with softening.

Mingazzini says that the dementia is graver in softening than in hemorrhage. Many authors admit the relative frequency of a return to normal psychic function. F. Marino, however, says that a return to a normal state is very exceptional and can only occur when the hemiplegia is slight and transitory. He says "even with hemiplegics who can appear, on superficial examination, as psychically normal, when permanent stigmata of hemiplegia exist, there are always stigmata more or less grave and manifest of psychic defects."

In general it is impossible to predict the duration of the trouble. Often these patients live ten, fifteen or even twenty years and

are finally carried off by a new seizure, by a renal or hepatic insufficiency, or by some intercurrent affection.

DIAGNOSIS.—From general paralysis the circumscribed lesions can be differentiated by the following characteristics. The prodromal period is shorter and less constant in the circumscribed lesions. In the latter partial disturbances of motility predominate, one limb feels heavy, there is a transient paresis of one limb, or of some fingers, a contracture of the fingers, a paralysis of the oculo-motor muscles, a permanent or transient ptosis. In paresis, on the contrary, diffuse disturbances predominate. The patients become awkward in precise acts, because the movements are poorly co-ordinated, presenting a certain degree of ataxia. This ataxia involves also the muscles of the lips and tongue and consequently one notes a hesitation in the speech.

Seizures sometimes initiate both diseases. In paresis they are followed by a generalized psychic enfeeblement, which shows itself and makes considerable progress after each seizure. The patients with circumscribed lesions on the other hand show only momentary intellectual disturbances and quickly regain their former ground. Definite intellectual disturbances occur as a rule only after the second and sometimes only after the third attack. Headache is more tenacious and profound, often localized in a fixed point in the apoplectics, while in the paretics it is diffuse and transient.

Paralysis after an apoplectic seizure is partial, durable and persistent, while in paresis the motor disturbances after the apoplectic form seizures are transient and often disappear at the end of a few hours.

The speech defect in paresis is easily distinguished from that in the circumscribed lesions, except when in the latter case there is a tremor of the lips, when the speech defect is the same in the two diseases. Lwoff lays great stress on the *hemi-tremblement* of the lips and muscles of the face, on the affected side, in the circumscribed lesions as opposed to the paretic tremor which is general and involves both sides of the face and tongue. This *hemi-tremblement* of the lips exists in the circumscribed lesions when the muscles in the domain of the inferior facial have participated in the hemiplegia and when at the end of a certain time a contracture of the paralyzed side of the face is produced. This

contracture, being slightly marked or in a latent state, can manifest itself by a deviation of the paralyzed side and provoke a trembling of this side on the occasion of voluntary movements as in speaking. In paresis the tremor is not localized upon one side and the orbicularis oris is entirely involved.

The fundamental character of the intelligence in paresis is a general enfeeblement *en masse* of the faculties, not only the intelligence but all the psychic being, the feelings, the will, are enfeebled, diminished. In the circumscribed lesions, on the contrary, the predominant, constant and most important character is the partial reduction of the mental faculties. One should seek in every case this fundamental state which is often masked by superadded accessory phenomena.

The changes of character differ in the two diseases. In the circumscribed lesions the patient becomes, often from the beginning, defiant, quarrelsome, aggressive, reticent, vicious, in a systematic fashion, and only when the enfeeblement has made great progress does he present a state of well-being and satisfaction. The paretic is not capable of any lasting feeling, he is mobile, is angry, laughs and cries at the same time. All is effaced in the psychic being of the paretic and it will be impossible to find with him a lasting desire.

The delirium in patients with apoplexy often follows the attack and is accompanied by accessory troubles which give it the character of a hallucinatory delirium which is very rare with paretics. As to the delirious ideas which complicate this hallucinatory delirium, the ideas of persecution are very frequent with apoplectics and rare with paretics. In the former they are more stable, more fixed and often purposeful, in the latter they are vague, mobile and poorly formed. It is more difficult to differentiate the melancholic and hypochondriacal ideas. In apoplectics they have more consistency, are brought together more logically, are more durable and not so absurd as in paresis. The grandiose ideas present few characters which can serve to differentiate them in the two diseases and it is rather by a study of the fundamental state on which they are grafted that one arrives at a diagnosis. The age of the patient should be taken into consideration. Paresis is rare before thirty and after sixty years, while the circumscribed lesions of a syphilitic nature are frequent before thirty (Fournier), after sixty years they are also frequently produced by all the

causes which alter the vessels—senility, intoxication, diseases of the heart, diabetes, etc.

The dementia following the circumscribed lesions can with difficulty be differentiated from the senile dementias. Mingazzini says, "the post-encephalomalacic dementia does not differ greatly from the common senile dementia and it is rather an anatomical than a clinical variety. The study of the prodromal period, of the period of the attack, and of the evolution will lead sometimes to a differential diagnosis.

Cerebral abscess is related to an infection either in the ear, nose or sinuses, abscess of the lungs or bronchi, or to a general infection.

Tumors of the brain, if they show mental and motor symptoms, are accompanied by headache, vertigo, vomiting and especially by the pathognomonic papillitis.

The treatment should be above all, physical. Internal treatment can only give results in syphilis in which mercury is often efficacious. The physical treatment consists in massage, passive movements and re-education. H. Meige, at the Congrés de Mèdecin, in 1904, called attention to the treatment of hemiplegics, especially to the treatment of the functional motor amnesias of these patients. "Certain movements which are possible the hemiplegic does not make because he has forgotten them."

Re-education benefits not only the motor but also the psychic functions. F. Marino says, "the diminution of the intellectual field goes parallel to the enfeeblement of all the modes of psychic activity, due in great part to a lack of exercise, an atrophy *ex non usu*, so much so that from a psychologic point of view, one can advise a motor re-education which thus becomes a psychic re-education." This motor and psychic re-education should be early and progressive, it is the most rational, the most capable method of treatment, if not of bringing the patient to his former state, at least of deferring and attenuating the symptoms of the terminal dementia.

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CEREBRAL TOPOGRAPHY AT THE SECTION TABLE.

By CLARENCE B. FARRAR, M. D.,

Assistant Physician and Director of the Laboratory, Sheppard and Enoch Pratt Hospital; Assistant in Psychiatry, Johns Hopkins University.

Since the accumulation during the past thirty years of the facts of histologic localisation in the cortex cerebri, it has become necessary for the brain pathologist to be familiar not only with the general structural relations of the cortical grey as a whole, but also with the specific architectonique of the several " organs " of the cortex, to revert to a phrenologic term. Not only do the distant areas representing special and determinate function, such as the precentral gyrus, the calcarine region, and the mid-first temporal convolution possess constant individual structural peculiarities, but the fields more closely related to each other both in location and function show likewise distinct differences in formation, less marked to be sure, as a rule in proportion to their proximity in space, but none the less constant. Such are the differences which exist for example between the cortex of the motor area for the face and of the motor area for the trunk, or between the cortex of the frontal pole, and that of the more proximal portions of the frontal lobe.

The regional differences in structure include variations in the thickness of the cortex itself and in its relations to the underlying white; peculiarities in columnar and lamellar arrangement; variations in the number of contained elements, nervous and non-nervous, their morphology and mutual relations, and in the proportions of the intercellular substance.

Obviously two cortices can only be satisfactorily compared, either from the anatomic or pathologic view-point, by comparing approximately similar areas, while in routine pathologic examination, it is essential, not only that representative areas be chosen for making sections, but also that in each case, as nearly as possible, the *same* representative areas be selected. This rule applies to the usual psychiatric material with assumably diffuse cortical processes. Cases with definite localising symptoms furnish of course individual indications for section. In the regular post-mortem work in the psychoses, therefore, certain definite regions

should always be made the subject of study, whatever other areas in addition, special indications or inclination may suggest.

The accompanying brain maps have been found useful in our laboratory in helping to insure the necessary uniformity of operation in removing cortical tissue for examination. At the same time they furnish a simplified topographic nomenclature by means of which, practically the exact site of a section can be indicated at once and in very brief terms.

As will be seen, only the more important fissures have been indicated, and the long convolutions are subdivided by dotted lines, usually into three approximately equal parts, which are numbered from the central regions toward the poles, or, in the case of the Rolandic gyri from above downward. A line joining the distal end of the Sylvian fissure with the proximal end of the lateral occipital fissure, separates the parietal from the temporal convolutions, while a second line dropped vertically from the distal end of the intraparietal sulcus, completes the separation of the parietal and temporal lobes from the occipital.

The indexing is self-explanatory. For example:

F^2L^1 = Frontal lobe, second convolution, left hemisphere, first or proximal block.

PCL^1 = Postcentral, left, upper third.

T^1L^3 = First temporal, left, third block.

IPL^2 = Infraparietal, left, middle third (gyrus angularis).

OL^1 = Occipital, left, upper block (above the lateral occipital sulcus).

T^4L^3 = Fourth temporal, left, distal block (gyrus fusiformis).

CML^4 = Callosomarginal, left (gyrus fornicatus), posterior block (adjoining gyrus Hippocampi, *HCL*).

The shaded portions in the diagrams represent the five blocks which are taken out at necropsy for histologic examination as a routine procedure. These blocks which should be at least 25 mm. on a side, are taken as follows:

(1) $APCL^1\bar{c}$ *Para* C.

Motor region including roughly the upper third of both pre- and post-central convolutions and the paracentral lobule. It represents the trunk and leg areas and contains the largest Betz cells.

The pia is not removed before making the sections, and should

any difficulty be experienced in locating the fissure of Rolando in the pia-covered hemisphere, its upper extremity is readily found in the following manner. Separate the hemispheres sufficiently to expose the paracentral lobule. The ascending ramus of the callosomarginal sulcus will easily be seen, bounding the paracentral posteriorly. The first fissure in front of the upper end of this ramus, just reaching over on to the mesial surface of the hemisphere, and as a rule pointing backward, is the fissure of Rolando.

(2) *Cun L* $\bar{c}$ T^5.

This block representing the visual cortex should be taken so as to include the mid-portion of the calcarine fissure, with a generous margin above and below; the lower portion particularly should be ample, as the visual formation (stripe of Vic d'Azyr) regularly extends a greater distance below than above the calcarine fissure.

(3) $T^{1-2}L^2$.

The block lies just below the post-central gyrus and includes the middle third of the first and second temporal convolutions, containing the specific acoustic cortex.

(4) HCL^1 $\bar{c}$ *Unc.* & T^4L^1.

This block representing the olfactory cortex is taken through the Hippocampus to include the uncus, and part of the adjoining fourth temporal convolution.

(5) $F^{1-2}L^2$.

This block, like the first, extends over both external and mesial surfaces of the hemisphere, and contains both first and second frontal convolutions.

In these five blocks we thus have represented the various areas of special sensation, as well as a typical sensori-motor cortex and the association field of the frontal lobe. The examination of these fields in a given case affords a general idea of the extent and distribution of the morbid process. If, however, a more detailed topographic examination is desired, a number of additional blocks, for example, the following five, are also taken:

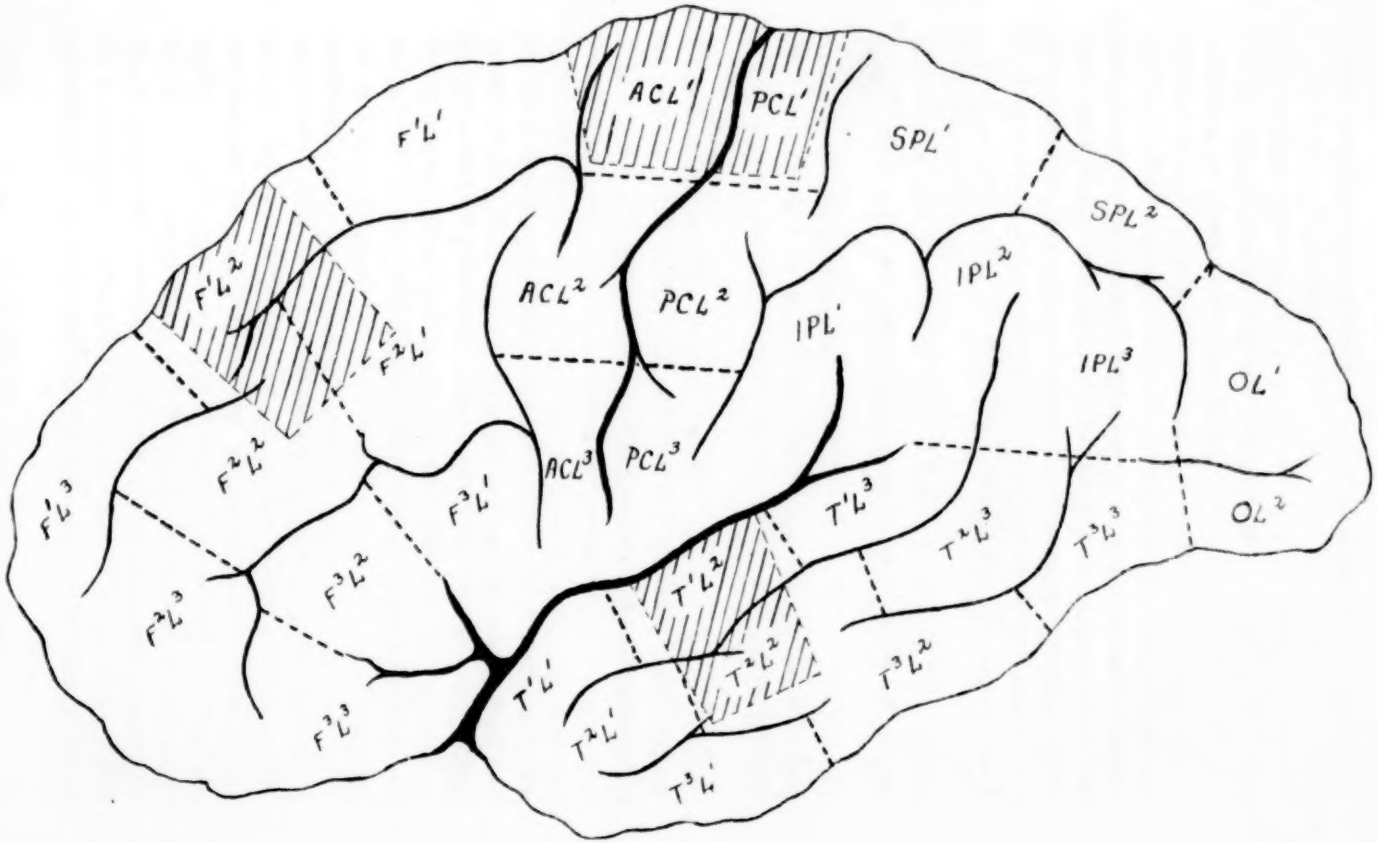
(6) F^3L^2 (Broca's convolution).

(7) IPL^2 (Angular gyrus).

(8) F^1L^3 (Frontal pole).

(9) CML^4 $\bar{c}$ *Precuneus.*

(10) $APCL^3$ (Facial area).


ACL'
PCL'
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F'L'
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F'L²
ACL²
PCL²
IPL'
IPL²
F²L'
IPL³
OL'
F'L³
F²L²
ACL³
PCL³
F³L'
T'L³
OL²
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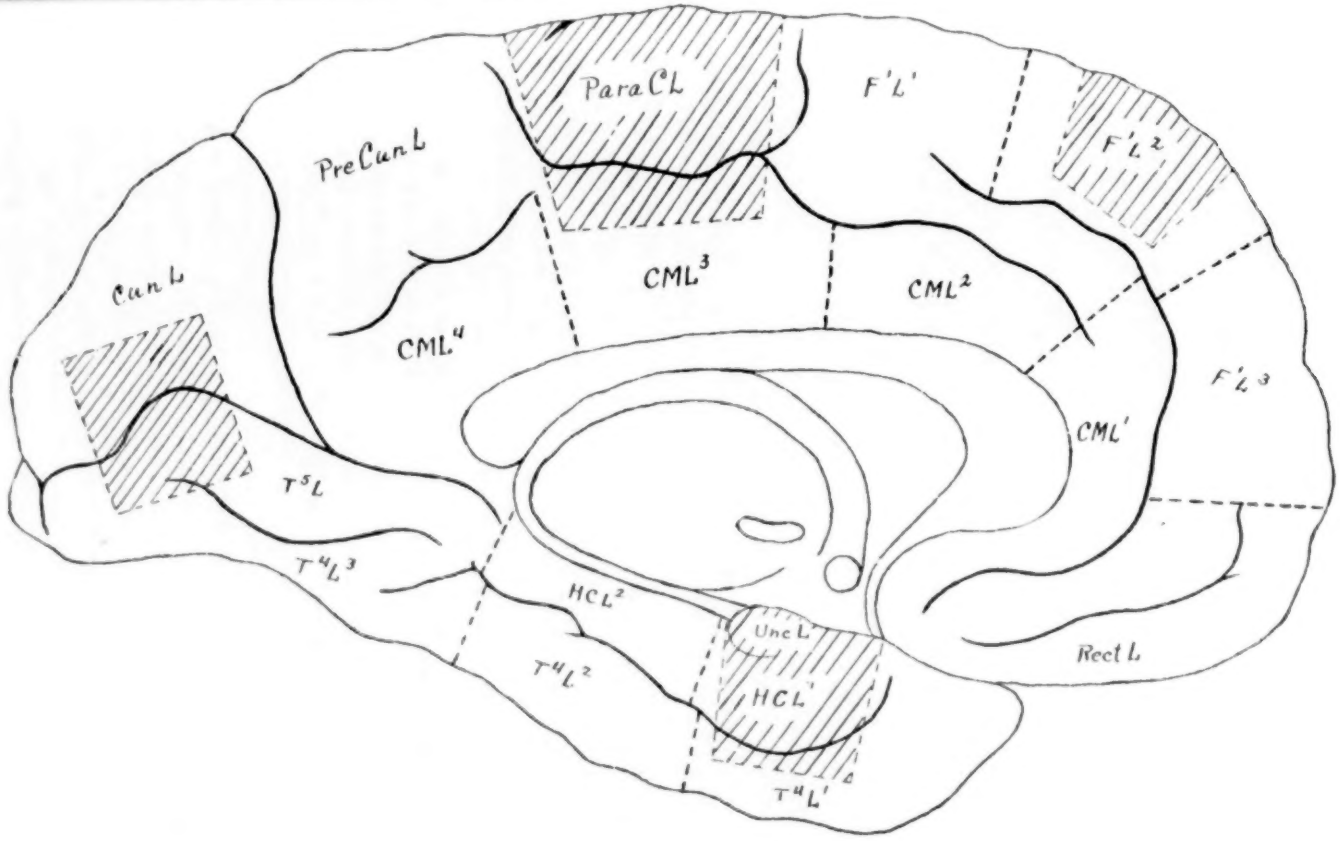
ParaCL
F'L'
PreCunL
F'L²
CunL
CML³
CML²
CML⁴
F'L³
CML'
T⁵L
T⁴L³
HCL²
UncL
RectL
T⁴L²
HCL'
T⁴L'

Clinical Psychiatry.

CLINICAL DEMONSTRATIONS.

By CLARENCE B. FARRAR, M. D.,

Assistant Physician and Director of the Laboratory, Sheppard and Enoch Pratt Hospital; Assistant in Psychiatry, Johns Hopkins University.

II.

DEPRESSIO AFFECTUS.

First attack in a young woman of 25. Unhappy marriage three years before. Long prodromal period with episodes of "nervousness," indigestion, insomnia, crying-spells. Duration of depressive phase, six months. Convalescence initiated by a hypomaniacal syndrome. Recovery.

As we enter the ward for acute cases our attention is at once arrested by a young woman who approaches slowly, with even measured steps and eyes cast down, looking neither to right nor left,—a feminine personification of *Il Penseroso*. The picture is so characteristic and so striking that it is likely to remain long fixed in the memory of the beholder.

As she draws near we see an attractive girl of about twenty-five, well developed and in fairly good flesh, but with complexion cloudy and marred by acne, suggestive of disorders of digestion and assimilation. Her facial expression indicates a real and dominant tone of consciousness, a fixed sadness without emotion and a degree of hopeless resignation. She is properly and neatly clad, and yet her coiffure gives unmistakable evidence of a certain lack of interest in her personal appearance.

Unless we accost her she passes without lifting her eyes, without interrupting the heavy rhythm of her tread. To our salutation she replies in a low monotone, scarcely audible, hardly raising her glance, and continues on her way; but if we say that we desire some words with her she pauses and attends.

In our attempts at conversation the first conspicuous fact with which we are impressed is the meagerness of the information which the patient furnishes. This is due first to a diminution and difficulty of the associative processes; to think and to speak cost obviously an unwonted effort. Added to this is a degree of indifference which characterises the condition,—an indifference which is rather apparent than real, and which is at the same time a feature of the patient's affect-depression and a consequence of the increased difficulty of her psycho-motor functions. As a result of these factors her voice is low pitched, of little tone, scarcely varying in inflection, and almost without accentuation. She replies to questions often after a little delay, slowly and briefly, answering short and simple questions much better than those involving more psychic activity. As we should expect there is little play of facial expression; yet her features reflect adequately the content of consciousness, and the gloom which is seated in her mind overshadows likewise her countenance. Nevertheless a slight sad smile appears as she shakes her head to our observation that she will soon improve.

Even these few moments' interview serves to show that the fundamental lesion in this case is in the realm of the *feelings*, that we have to do in other words, with a primary *affect-psychosis*. The mental processes are to be sure deranged, but their primary change is a quantitative one which may be denoted by the term hypopsychosis, the qualitative changes which we shall presently notice being rather dependent upon this quantitative change and the accompanying depressive affect-tone.

To state the subject schematically, we have first a functional interference with the natural ready succession of the psychic elements. This interference expresses itself in an affect alteration in which the euphoria of health is replaced by a *dysphoria*—a vague oppressive feeling that all is not well. The mental horizon becomes overcast and the spirit is borne down by a formless gloom. This stage represents a real Melancholiac limbo, and it is through this limbo that our patient has just been passing,—and her daily course would suggest that she has not yet reached the lowest level of the valley of the shadow through which she must pass. Before her she sees only a wall of ominous clouds which at first were without form, unpeopled by the creatures of an active

fancy. ("I am not like other people—I shall never be myself again—Some awful end awaits me—I can never see my mother again.")

As will be seen the disturbance is here chiefly in the *autopsychic* sphere of consciousness. Allopsychically the patient is tolerably clear. She knows her whereabouts, correctly identifies those about her, gives the calendar date and the approximate duration of her stay in the hospital as well as the time (about two months previous to her admission) when the conspicuous symptoms of her present illness appeared.

We learn from her that she was at this time staying with her husband at a boarding house in Brooklyn. For at least eight months previous to this she had been in rather delicate health, troubled much with insomnia and gastric irritability, often vomiting her food shortly after eating. These symptoms however had not been constant. In the Brooklyn *pension* the patient formed the acquaintance of a physician's wife who seems to have taken a good deal of interest in her case. This lady gave her some pills (perhaps laxative) together with talks upon spiritualism. The soil was just ripe for the developing psychosis, and the first definite sign of alienation came to light as a suspicion which soon became an unreasoning belief that the physician's wife had acquired a mysterious influence and power over her and that her entire personality had been changed through the agency of the medicine which this individual had given her.

Here we see a symptom which is repeatedly encountered in patients of this type,—an unhappy attempt to explain their condition by misconstruing the relations of cause and effect. First come the ill-feelings. These they cast about to interpret, and the insufficiency of the associative faculty already mentioned, allows them to fix upon some circumstance near or remote, which may be of trifling significance, and to trace to this circumstance all the misfortunes of their illness.

In the depressive psychoses of later life this assumed causative factor is very commonly some long forgotten pecadillo of youth, and the patient declares that in his misery he is only paying the just wages of sin.

In our patient however there is no suggestion of auto-accusation, and ideas of sin and retribution do not enter the reckoning.

She is not at the time of life which yields readily to the domination of these thoughts,—although to be sure no age is immune.

With the development of the idea of changed personality which she attributes to the harmless dose administered nearly four months ago, we note the invasion of the second sphere of consciousness,—that of the *Somatopsyche.*

Ideas of physical derangement accompanied by a subjective certainty which listens to no reason or suggestion, are never entirely lacking in a well marked case of affect-depression, although they may be absent at first and appear only with the later unfolding of the disease. These ideas may vary from mildly exaggerated representations of gastro-intestinal disorder to the wildest conceptions of organic chaos.

In our patient they are of moderate grade. At first there was a vague sense that her whole physical economy was strange and unnatural, the idea springing chiefly from two factors,—the disturbed digestion and menstrual irregularites, the last two periods having failed to appear. Recently she startled us with the declaration that she had changed into a dog. ("I know I am not human. . . . My nature has changed. . . . I look like a dog and have become one.") This idea is perhaps the outgrowth of an incident of the initial stage of the psychosis when she complained of a small dog at the place where she was staying as very annoying and troublesome, whereupon some one inconsiderately remarked that she herself was no less so, or something to that effect.

The patient's *autognosis* in brief is this: She is changed in her physical, mental and moral nature; her bodily functions are vaguely abnormal; she has lost all natural interest and feeling. These changes she did not bring upon herself and is at a loss to understand excepting that they had their origin in the action of a drug. The organic disorder has culminated in an incurable disease of the brain. Restoration to mental health is therefore out of the question. She will never be able to leave the hospital, but will gradually grow worse and worse, and finally lose all her faculties. She must nevertheless live forever, and the future has nothing but awfulness and horror in store.

With this psychic background we should naturally look for *suicidal tendencies,* and these indeed are present. She has re-

peatedly begged the nurses to give her poison and her manner leaves no doubt as to her intentions should she obtain it. Several days ago an accident occured, such as is almost impossible to prevent entirely in a hospital where a considerable degree of freedom is allowed the patients. She was out for a walk with a nurse and two or three others, and lagging a little behind, watched her opportunity and made a successful dash for freedom. Boarding a passing car she reached the city, where she procured a quantity of tincture of opium and is believed to have swallowed an ounce or more of it. Thanks however to the irritability of her gastric mucosa the drug was promptly rejected and untoward results did not follow, the patient being apprehended and returned to the hospital. The desire for death continues, she entreats us to despatch her, goes to her room and kneeling prays that the end may come, or throws herself upon the floor murmuring, " Oh, why can't I die? I am crazy."

As will be seen the *insight* here is qualitatively correct, in that the patient realizes that her brain is diseased and that she is insane. Her error is only quantitative, in that the subjective representation of her disease is greatly exaggerated and she is convinced that recovery is impossible. As a matter of fact she will almost certainly regain her sanity, very likely within the next few months.

A phase of the affect state common to this disease is a subjective feeling of loss of interest in the affairs of life, and of proper affection for friends and relatives (*psychic hypæsthesia*). Said our patient, " I know there is a change in me because I don't take any interest in anything more at all." Moreover to her father's habits (alcoholic) which previous to her illness had been a source of considerable anxiety to her, she has become entirely indifferent; and finally it was early remarked by those nearest to her that she no longer displayed any love for animals,—a characteristic which in health was strongly developed. That the loss of affection is not complete, however, is shown by the fact that the patient's one desire has been to see her mother, whose visits have been practically her only solace. With others she is quietly uncommunicative and rather avoids than seeks company.

On the *physical* side are to be emphasised the continued gastro-intestinal symptoms. She has no appetite and if left to herself

would take very insufficient nourishment; at times after eating the food is still regurgitated but under bed treatment with milk diet the gastric irritabilty has largely disappeared; the tendency to constipation requires constant attention. The menstrual function is absent; sleep is poor; headache is often complained of. In weight she is fifteen or twenty pounds below her normal, but has varied but little in the two months since admission to the hospital, weighing then 140, now 134. In the urine is a trace of albumen, and indican is somewhat in excess.

Turning now to the *etiology* of the condition in which we see the patient we must take a rapid glance at her whole past life. As an hereditary trait we find a rather exaggerated dread of insects. This has always been present and was characteristic likewise of the mother, being especially marked while she was pregnant with the patient. The latter grew up normally, did well enough in school but never manifested a liking for books or any considerable aptitude for study. Puberty occurred without incident at eleven, directly after a severe attack of scarlatina.

At about twenty the horizon was clouded by an *affaire d'amour malheureuse,* in which her lover, owing to previous obligations the justice of which the patient herself recognised, concluded finally to marry another girl. Up to this time she is believed to have been perfectly well, but she was much cast down by the affair, which has doubtless had not a little influence upon subsequent events. Not long afterwards she met the man whom at twenty-two she married, though feeling for him no strong affection. Domestic life appears not to have been particularly happy and there is mention of a suicidal attempt made by the patient before the honeymoon had scarcely waned. The circumstances of this incident are not revealed. As further evidence of a somewhat abnormal affect-state is to be noted that within the first two years of married life the patient voluntarily brought about two miscarriages, and that the maternal instinct seemed to be lacking.

Shortly after the second miscarriage a state of affairs developed, continuing several weeks, which the family characterised as "indigestion." There were loss of appetite, gastric irritability without conspicuous nausea, and insomnia. In addition the patient was undoubtedly pathologically depressed, she had fre-

quent "crying-spells;" but what chiefly attracted the attention of the family were the digestive phenomena.

These events occurred in the winter, about a year ago, and were followed by improvement during several months. In late spring she was considered well and undertook the trip to Cuba to join her husband who was at the time employed there. Here she did badly from the first; the southern climate did not agree with her, the cares of housekeeping were new and caused her a good deal of worry; but the chief source of annoyance was the tropical insect life which left her no rest by day or night. Her inherited fear of these creatures became markedly accentuated, she lost sleep, appetite and flesh, life became a burden, and suicidal thoughts were entertained. Returning north, her condition again improved; but the storm which had been gathering for three years, which had frequently been heralded by forewarning clouds, at length broke in the manner already described.

The case is interesting inasmuch as it presents in as pure a form as one could desire a simple but profound affect-depression,—a real sadness, the expression first of organic ill-functioning, and culminating in despair and *odium vitæ*. The psycho-motor processes are also involved to a certain degree it is true, as they are in the majority of cases; there is no perversion of the special sensory representations, no elaboration of insane ideas,—the clouds are thick and awful, but have not assumed specific terrifying forms.

Finally is to be noted particualrly what may be spoken of as the *harmony of conscience*,—the mutual agreement between all the elements of psychic life. The thought content is adequately reflected in the feeling tone (agreement of form and color), and both are perfectly projected in facial expression, gesture, and gait.

SECOND SEANCE (March, 1906.)

Three months have elapsed since the last interview and we scarcely recognise the patient in the smiling, vivacious young woman who now cordially greets us. She believes that she is nearly well, complains only at times of a slight burning sensation in the top of her head (a not infrequent accompaniment of convalescence), characterises her former dark thoughts as "delu-

would take very insufficient nourishment; at times after eating the food is still regurgitated but under bed treatment with milk diet the gastric irritabilty has largely disappeared; the tendency to constipation requires constant attention. The menstrual function is absent; sleep is poor; headache is often complained of. In weight she is fifteen or twenty pounds below her normal, but has varied but little in the two months since admission to the hospital, weighing then 140, now 134. In the urine is a trace of albumen, and indican is somewhat in excess.

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sions," and eagerly inquires when she may have her discharge from the hospital.

The return of health has taken place through a succession of very interesting stages. It was first noticed that when for a few days the gastric symptoms would be more troublesome, the mental condition would improve, the patient remaining quietly in bed, not complaining, and yielding willingly to treatment. She would even smile naturally sometimes at a chance remark. Curiously enough with the relief of the digestive troubles the mental depression would return with full weight. Soon, however, there was evidence of rifts in the clouds. Her face would light up, she would admit feeling a little better and would ask if there was some possibility of getting well. In the same breath she would declare that she could not understand the feeling of relief which sometimes came over her, and that she recognised the folly of her question inasmuch as she knew that her trouble was a hopeless brain disease. We see here in the subsidence of the pathologic symptoms a striking similarity in process to their genesis six months before. Then the abnormal *feelings* first entered and finally dominated consciousness although not subjectively understood or explained. Only later were the *thought processes* perverted to fit them. So now the euphoria comes in irresistible waves, to the patient inexplicable, indeed as she herself says, out of keeping with the habit of her thought.

The euphoric waves became more and more persistent and often took on a *hypomaniacal* coloring in which would occur occasional outbursts of hilarious laughter over some trifling incident. The patient's gait became brisk, her face beaming, she sought occupation and sang loudly at her work. These symptoms while unmistakable in their character did not amount to a definite maniacal phase. The question nevertheless was only a quantitative one and the event was at first impossible positively to foretell although the weight curve soon indicated convalescence.

With the gradual establishment of a more stable affect-tone the earlier black certainty of despair had given place to a silver-bordered doubt, and this yielded in turn to a golden hope. With almost maternal joy the patient announced the returning warmth of fellow feeling, the reviving affection for those whom she should

love, the appreciation of kindness shown her, and gratitude to those who ministered to her needs.

In her present condition convalescence is fairly established. The balance may be said to have returned to its equilibrium only showing now minute oscillations. A few weeks longer in the hospital are desirable, provided the patient does not become too uneasy, in order that the *habit of health* may become fixed under supervision. She enjoys the liberty of the grounds and is anxious to follow our advice.

It remains but to note the changes in her physical condition. The digestive functions appear normal; the gastric irritability has subsided, the patient eats with relish and has required no laxative for a month. Her complexion has improved, the acne largely disappearing. The menstrual function was re-established last month after three months absence, coming at what would have been the correct time had no periods been omitted. Her blood pressure is normal, ranging from 116 to 122. During the brief transition period with hypomaniacal symptoms it was distinctly lower, ranging from 102 to 112, while during the previous stage of deep depression it ran from 115 to 130.

In weight the patient began to gain almost before the first evidence of mental clearing,—always a welcome prognostic sign. The increase in weight has been fairly steady, and during the past eight weeks the curve has risen from 134 to 158, the latter figure representing approximately her best weight during health. There has been thus an average gain of three pounds a week and the curve appears to be still on the ascent.

American Medico-Psychological Association

PROCEEDINGS OF THE SIXTY-SECOND ANNUAL MEETING.

TUESDAY, JUNE 12, 1906.—FIRST SESSION.

The Association convened at 10 a. m. in the Convention Hall of the Hotel Vendome, Boston, Mass., and was called to order by the President, Dr. C. B. Burr, of Flint, Michigan.

The President introduced Dr. George T. Tuttle, Chairman of the Committee of Arrangements, who said: "It is ten years since this Association met at Boston,—not a long time to look back upon, but long enough for many changes. There has been a steady improvement in the care and treatment of the insane during this period. We in Massachusetts have witnessed the transfer of the insane from almshouses to hospitals under State care. In these hospitals have been established reception wards and infirmary wards, and improvement in the nursing service throughout the country by the establishment of training schools has been very marked. As some of you know, I have been making inquiries concerning the male nurse, and incidentally, I have learned that in at least thirty-seven hospitals of the country, training schools for nurses have been established in the last ten years.

"Aside from this work, there has been a great increase in interest in the study of psychiatry during this period, as is witnessed by the establishment of laboratories of pathological, chemical, physiological, and psychological research, since, from the difficulty of our subject, the problem of psychiatry needs to be attacked from all sides. The establishment of these laboratories has necessitated the employment of a number of men who are fitted by previous training for research work, which means an increase of hospital staffs throughout the country.

"With the increase in knowledge of mental diseases has come better instruction for the medical student. In my day, psychiatry could scarcely be studied as a subject by itself. At the present

time, the student of the Harvard Medical School not only has a good course of lectures on the subject of insanity, but has valuable clinical experience which was not possible twenty years ago. This matter of teaching students psychiatry receives a fresh impetus by the departure of the University of Michigan, which has recently established a psychopathic clinic,—the first, so far as I know, among English-speaking people.

"Besides this, there is a movement in the direction of preventive medicine by opening so-called psychopathic wards in connection with general hospitals, of which the one at Albany is the most noteworthy example.

"One should not forget to mention the work of the Pathological Institute of the New York State Hospitals, which is a source of inspiration to the assistant physicians who go to Ward's Island for three months' instruction and take back to their respective hospitals the knowledge and methods which they have there acquired.

"These, and many other things which might be mentioned, make a good record,—one of which we may be proud. The most of it comes within the last ten years.

"It is well for us to meet each year to talk these matters over, to exchange opinions and gain inspiration for our work.

"The President has informed me that as Chairman of the Committee of Arrangements it is my duty to introduce the speakers of the morning. It certainly is a privilege to introduce to you these gentlemen who are to address to you words of welcome. I present to you first, one who is prominent in public affairs, a journalist, a soldier, and a statesman, who has won distinction in each capacity who was never more respected and honored by good men than he is to-day; an able and faithful executive, who believes in a government of laws and not of men. I have the honor to present to you His Excellency, Curtis Guild, Jr., Governor of the Commonwealth of Massachusetts." (Applause.)

Gov. GUILD.—The Legislature is in active session to-day, which makes it impossible for me to stay with you as I desire. You will therefore, I am sure, kindly excuse me if I am very brief in my remarks and am obliged to leave you at a very early hour.

It is a very pleasant privilege to be able to welcome you to the Commonwealth of Massachusetts, to extend to you a hearty greeting and

to wish that you may have a profitable as well as a pleasant stay within our borders. The Old Commonwealth is proud of her reputation for benevolence, prouder perhaps than of any other of her characteristics. It may be known to you that she extends her benevolence not only to the cities and towns within her borders, but to those without. No Commonwealth is so generous in the care of the various municipalities and townships of the State. She strips herself of revenue and license fees, for in this State these are given to the separate cities and towns almost entirely. She strips herself of corporation taxes, which in other commonwealths are reserved entirely for State uses, and gives these very largely to the different communities. Like the pelican in her piety, she takes care of the unfortunate and unhappy, which in other commonwealths are provided for by the separate municipalities. The entire cost of caring for the insane in this Commonwealth is borne by the State government.

It is therefore with peculiar propriety that you should be welcomed to-day by the Chief Executive of this Commonweath. We are proud of the work that has been done here, in which we think we are pioneers, especially the work being done for feeble-minded children. I trust you may have occasion to visit our colonies for these unfortunate youths, where boys who have had absolutely no ray of intelligence have been carefully trained until they are reclaiming useless ground and raising crops on which the occupants of our State institutions are fed.

However, in speaking of the pride of Massachusetts in any of her characteristics, I should refer to a pride that is more than local. Proud as we are of our own Commonwealth, as we are of our own institutions, there is a feeling of loyalty that is broader and deeper and greater. You remember the familiar old phase, *Homo sum; humani nihil a me alienum puto:* I am a man, and nothing that is human is foreign to me, and what Massachusetts is proudest of is that wherever there is any good to be done, whether it is helping the distressed of San Francisco, the shipwrecked sufferers of Seattle, or those made homeless by the overflowed jetties at New Orleans; whether it is preserving the primitive Appalachian forests of North Carolina, or in the White Hills of New Hampshire that the water supply shall be preserved, there is nothing American that is not at home in the Commonwealth of Massachusetts.

I trust you may find your stay here not only pleasant and interesting, but profitable to yourselves and to those poor unfortunates to whose care and treatment you have devoted your lives. (Great applause.)

DR. TUTTLE.—The physicians of Boston and vicinity and the public, which has taken nearly as much interest as the physicians themselves in certain phases of the work of the American Medical Association, have had a rich feast, perhaps I might almost say a surfeit, of things medical this last week, and the end is not yet. Besides the meetings of our own Association, there are this week

those of the Massachusetts Medical Society, an organization of nearly three thousand physicians of the Commonwealth. We have with us this morning a representative of that Society, and I take pleasure in introducing to you an eminent surgeon, the son of an eminent surgeon, President of the Massachusetts Medical Society, Dr. Arthur T. Cabot. (Applause.)

DR. CABOT.—It gives me pleasure to greet you on behalf of the Massachusetts Medical Society and to give you a hearty welcome to Boston. A former president of our State Society, Dr. Luther V. Bell, was a pioneer in the branch of medicine which you represent and the State of Massachusetts has long taken a special interest in the care of its insane. Indeed, the McLean Asylum, the Perkins Institution for the Blind, the schools for deaf mutes and for feeble-minded, together with the insane hospitals scattered throughout the State, attest the loving care of Massachusetts for those crippled either in body or in mind.

It is an honor that you have selected Boston for your place of meeting, and these gatherings do much to arouse and stimulate an interest among us in the study of mental disorders. The public has been liberal in its charity to the insane since Dr. Rufus Wyman first presided over the McLean Hospital. Constant improvements have been introduced in their care and treatment, largely through the efforts of your Association. It is hard for the present generation to realize that up to the middle of the last century the insane were confined much as criminals are.

Your Association has ever been active in pushing investigation to its utmost limits in the study of mental disease. We look with hope to your chemico-biological investigations as sometime perhaps leading to a better understanding of nerve force, what it is and how it may be fostered, even possibly produced.

The rest of us of the profession who deal most particularly with the grosser ailment of the body must acknowledge a constantly increasing debt to the psychologist who shows the effect of mind upon material substance and teaches us the wonderful power of a disordered mind in causing the body to put on a semblance of disease which does not exist. Many times in each year a surgeon is obliged to decide whether a patient has some internal disease or whether the pains and seeming disturbances of function are fictions of the mind.

It is no new thing that the workings of the mind are potent to make and modify symptoms, and we all recognize that this is the reason for the popular successes of mind cure and of the Christian Scientists, who, blown up with the pride of partly realized truths, think they are in touch with the essence of life.

A most serious practical difficulty which confronts the practitioners of medicine is how to produce on their patients profound psychic effects without resorting to charlatanry or deceit. The management of patients

requiring this sort of treatment is of vast importance and yet is little understood by the general practitioner. We look to you gentlemen, to show how these effects may best be produced, and if you can tell us how they can be produced without deceit we shall be correspondingly grateful.

It has been recently said, with considerable truth, that it is not worth while to deceive a patient. If there are any patients, however, in whom we must sometimes encourage hopes that we do not wholly feel ourselves, they are those with nerves unstrung and minds unbalanced by the exhaustion of serious illness.

In dealing with patients I find it hard to know what is true in diagnosis and prognosis, and I often find by subsequent happenings that my first beliefs, truly held, have been proven false. This being the case it seems better to often refrain from imparting opinions however plausible until they have stood the test of time and to sometimes leave unpleasant news to be disclosed to the sufferer by the Almighty in His own good season.

We wish you great success in your meeting here; may you make substantial advances in acccurate knowledge and may your deliberations discover new paths along which further advances may be made.

In closing, Dr. Tuttle reminded me just before I stood up that a long time ago he spoke to me about the possibility of the Medical School Buildings being open to this Association. This afternoon the buildings are in the hands of the Massachusetts Medical Society, and as the President of that Society, I am very happy to extend to you a cordial invitation to visit the buildings at that time. Unfortunately, it is necessary to have some badge or mark by which those who are in charge of the buildings may know that you have had this invitation and that you are the guests of the Massachusetts Medical Society. The reminder from Dr. Tuttle came so late that I am afraid I cannot arrange any formal method of supplying you with badges, but if Dr. Tuttle will sign cards with his name and give them to those who visit the buildings, I will see that that name is regarded as a passport at the gate. (Applause.)

Dr. Tuttle.—The thoughtful citizen of Massachusetts looks with pride upon its State Board of Health, which has a national and an international reputation for its investigation of methods for the purification of water and the disposal of sewage. The present system of our metropolitan water supply was built after designs made by this Board. It makes and distributes the antitoxin serum which has done so much to limit the fatality of epidemics of diphtheria. It enforces laws against the adulteration of foods and drugs. It protects the public health from unseen dangers.

The one, to whom above all others is due the credit of this

admirable work is he who has been Chairman of the Board for twenty years and who in many other capacities is rendering distinguished public service. I have the honor to present to you the Chairman of the State Board of Health, Chairman of the Board of Trustees of the Massachusetts General Hospital, Dr. Henry P. Walcott. (Applause.)

DR. WALCOTT.—When I accepted Dr. Tuttle's very kind invitation to be present here, I must confess he did not make it understood in what capacity I was to address you. Among the various functions which your Chairman assigned to me, he was very careful not to state that, for a limited term, I was a member of the board which also fulfilled the functions of a commission in lunacy in this Commonwealth. Fortunately, it was a great many years ago, possibly twenty years. The Commonwealth concluded it was better to have an independent board and so established that independent board of insanity which has brought so much credit to the Commonwealth. The State Board of Health has, under the laws of the Commonwealth, very large powers in the exercise of its functions, but I am not quite willing to assume that these functions include caring for the mental as well as the bodily health.

The capacity in which I am most willing to bid you welcome is as trustee of the Massachusetts General Hospital, and the reason for doing it is this: I believe that this hospital has an absolutely unique history among the hospitals of this country or any country, at any rate, of hospitals founded as far back as 1815. It is of course known to you that the great hospitals of the continent earlier than the date mentioned were founded by the great religious orders. The oldest hospital, I think, in this Union was founded by that great Bostonian born and bred, loaned by us to the city of Philadelphia. Then came one or two other similar hospitals, and in 1810 two physicians, and I think this is the first instance in the history of the foundation of hospitals where physicians alone led in the work, issued an appeal to the good people of Massachusetts asking them on the usual grounds of humanity to maintain a hospital for the relief of the disabled sick. That appeal, concluded with one sentence, which appeared then for the first time in a plea for the foundation of a hospital; a statement that this hospital was to provide the community not only with a shelter for the sick, but was to give the community better physicians.

By a fortunate coincidence, for the attention of this meeting at any rate, the first department to be opened was the McLean Asylum at Summerville, since transferred to Waverley, and now called, to illustrate the progress of the treatment of mental diseases, the McLean Hospital, and in the name of that hospital, rather than as a member of the State Board of Health, I prefer to bid you welcome to this community and hope that your stay here may be a pleasant and agreeable one, as I know it will be profitable. (Applause.)

THE PRESIDENT.—The words of welcome, heard by one who has been in attendance upon the meetings of the American Medical Association during the last week carry deep meaning. Never, during my connection with that Association, have arrangements been so elaborate, a greeting more hearty and everything carried on according to a so well-defined plan without jar or a discordant note as in Boston during the last week. The profession of New England has certainly solved the difficult problem of caring for large numbers of visitors and making them comfortable. During that time no one has lacked for anything which he required in reason and a hearty greeting has come to everyone from every source.

I am gratified that those in this Association, who come in at the eleventh hour, so to speak, are still not to be deprived of their penny. We thank you very much for your cordial welcome, and in the name of the Association, I would invite all the physicians who can find it convenient to do so to attend the meetings of this Association and participate in its discussions. Also those interested in charitable work in connection with hospitals or eleemosynary institutions. There is as a rule much in the program of this Association of general interest.

We thank you again very heartily for this warm and cordial greeting. (Applause.)

THE PRESIDENT.—The next on the order of business is the report of the Committee of Arrangements.

DR. TUTTLE.—Your Committee of Arrangements has a brief report to make because it has had little to do. When we were informed of our election, we were also informed of this resolution which was passed by the Council:

"*Resolved*, That it be the sense of this Council that whereas the custom of the local members of the Association, and the local profession, furnishing social entertainment for us entails an extra and unnecessary expense to them, it should be eliminated. And be it further

"*Resolved*, That the local committee be instructed and requested to secure a suitable place for meeting, arrange for hotel accommodations, and provide the speakers for the Annual Address and the Address of Welcome, and that this should constitute their whole duty."

We found, however, that something else needed to be done and that was the securing of a reduction in rates from the different

passenger associations of the country. Our membership is so small that they would give us little consideration. We tried to come in under the shelter of the American Medical Association and to get the same rates for our members, but without avail until the American Academy of Medicine, the Pension Examiners, and above all the Christian Scientists decided to come here in the second week of June, when the railroads became reasonable (laughter), and we got the same reduction in rate that was given to the American Medical Association.

We selected The Vendome because it is in a quiet location, is a good house, has a good audience room and gives a reduction from its regular rates to our members.

We have exceeded our instructions in some particulars, as, for instance, in suggesting the visit to the Harvard Medical School buildings, to which you have had an invitation. I think you should accept this invitation and see the latest expression in buildings of what is needed for a medical education. In expense and completeness they come first, so far as I know, in the world.

Also I am authorized by the trustees of the Massachusetts General Hospital to invite the Association to hold their afternoon meeting on Thursday at the McLean Hospital at Waverley. If it is a pleasant day, special cars will leave Boston immediatey after the morning session, arriving at Waverley in season for luncheon, after which the Association can visit the hospital and hold the afternoon meeting.

There is one thing which the committee has done. The Section of Psychiatry of the American Medical Association, as well as other sections, had exhibits, and the various hospitals for the insane in Massachusetts had such an exhibit which has been kept together and will be set up in the old Harvard Medical School building, Boylston street, corner Exeter, Lecture Room "E." It will be ready for inspection to-morrow evening. It is not very large, but is something new and I think it is worth a visit. You will find there specimen histories and records, photographs of Massachusetts institutions, products of patients' industry, enlargements of micrographs to illustrate histological work, and other histological work, and other preparations of interest to psychiatry. They will be ready for inspection early to-morrow morning.

Although your committee was forbidden to provide special en-

tertainments, having observed that no one except the President and Secretary is obliged to be here and listen to all the papers (laughter), we have arranged with the committee of the American Medical Association who were preparing a guide book to print enough so that we could have what we needed. Consequently we have thus obtained a guide book of Boston which will enable you to find your way about and make various excursions for your diversion. We also have obtained time tables for the Plymouth and Gloucester boats, which you may find useful.

Beyond this, your committee has done nothing. (Laughter and applause.)

Dr. Woodson moved that this report be accepted and adopted and that a vote of thanks be tendered the committee for the very thorough manner in which they have performed their duties. Carried unanimously.

THE PRESIDENT.—I assume that this carries with it the acceptance of the invitation to go to the Harvard Medical School this afternoon.

A motion was then adopted that the Association adjourn this afternoon at 3.30 o'clock to accept the invitation to visit the Harvard Medical School, and that the rest of the program be postponed until evening, so that Wednesday's program may not be disarranged.

THE PRESIDENT.—As you know, the hand of death has been laid heavily upon the Association during the past year. Among those who have died are my warm personal friend, Dr. Edwards; that patriarch in psychiatry, Dr. Stearns; that courtly Southern gentleman, Dr. Blackford; that pillar of the Association, Dr. Richardson; that accomplished physician, Dr. Langdon; and lastly, our late beloved Secretary, Dr. Dent. Memorial notices of all these will be read in due time, but it seems fitting that that portion of the report of the Council which has to do with its action in New York last January, following Dr. Dent's death, with the memorial which accompanies it, be accepted and adopted by the Association. I will ask the Secretary to read that portion of the report at this time. [The action of the Council was published in the JOURNAL for January, 1906, page 515.]

The report was then accepted, adopted and ordered spread on the records of the Association.

THE PRESIDENT.—I also would announce that memorial notices of Dr. John F. Miller, of Goldsboro, N. C., and Dr. J. W. Smith, Fulton, Mo., of whose death the Chair has just learned will be prepared for the coming volume of the Transactions.

I will now call upon the Secretary for the second portion of the Council's report.

REPORT OF THE COUNCIL.

At a meeting of the Council held June 11, 1906, it was resolved: "That it be the sense of this Council that in the case of a member dropped for non-payment of dues, he may be reinstated on written application to the Council, provided the back dues are paid and there is no other objection to his election."

The following resolution was also adopted: "That it be the sense of this Council that an associate member in good standing who makes written application for active membership, not less than three years after his election to associate membership, may be elected to active membership at any meeting of the Council and his name submitted for final approval to the Association."

The appropriation of $200.00 for the American Journal of Insanity was approved.

The appropriation of $25.00 for the use of the American Committee of the International Medical Congress was approved.

The report of the Treasurer has been received and is referred to the Association for consideration to-day.

The report was accepted and adopted.

THE SECRETARY: The Council recommends the following named physicians for membership in the Association:

For Honorary Membership.—Henry M. Bannister, M. D., Evanston, Ill.; Daniel Clark, M. D., Toronto, Ontario.

For Active Membership.—George Sheldon Adams, M. D., Yankton, S. D.; Charles Lewis Allen, M. D., Trenton, N. J.; James Vickers Anglin, M. D., St. John, N. B.; Henry S. Atkins, M. D., St. Louis, Mo.; Christopher C. Beling, M. D., Morris Plains, N. J.; James R. Bolton, M. D., Fishkill-on-Hudson, New York; M. D. Brochu, M. D., Beauport, Que.; Henry Buttolph Carriel, M. D., Jacksonville, Ill.; L. Pierce Clark, M. D., New York City; Charles Gorst, M. D., Mendota, Wis.; George Tryon Harding, M. D., Columbus, Ohio; Charles E. Laughlin, M. D., Evanvsille, Ind.; G. H. Moody, M. D., San Antonio, Texas; Charles H. North, M. D., Dannemora, N. Y.; Herman Ostrander, M. D., Kalamazoo, Mich.; John

Preston, M. D., Abilene, Texas; John T. W. Rowe, M. D., Ward's Island, New York City; William L. Russell, M. D., Poughkeepsie, N. Y.; Edward A. Sharp, M. D., Katonah, N. Y.; Charles Edward Thompson, M. D., Gardner, Mass.; Berthold A. Williams, M. D., College Hill, Ohio; Samuel Worcester, M. D., Stamford, Conn.; David Young, M. D., Selkirk, Manitoba; George S. Youngling M. D., Central Islip, N. Y.; George A. Zeller, M. D., Peoria, Ill.

For Associate Membership.—William W. Coles, M. D., Westboro, Mass.; Edward L. Hanes, M. D., Sonyea, N. Y.; Morris J. Karpas, M. D., Ward's Island, New York City; James A. Mackintosh, M. D., Worcester, Mass.; Grace E. White, M. D., Frankford, Philadelphia, Pa.

For Reinstatement.—Marcus B. Heyman, M. D., Central Islip, N. Y.

The following applications for active membership were considered informally, and in accordance with the Constitution were deferred for final action until the next annual meeting:

Charles W. Burr, M. D., Philadelphia, Pa.; L. H. Calloway, M. D., Nevada, Mo.; Earl H. Campbell, M. D., Newberry, Mich.; Charles Edward Doherty, M. D., New Westminster, B. C.; Charles E. Hickey, M. D., Coburg, Ont.; William F. Kuhn, M. D., Farmington, Mo.; Donald Campbell Meyers, M. D., Deer Park, Toronto, Ont.; Daniel T. Millspaugh, M. D., Paterson, N. J.; William Pickett, M. D., Philadelphia, Pa.; Frederick D. Ruland, M. D., Westport, Conn.; Edward Ryan, B. A., M. D., Kingston, Ont.; William E. Sylvester, M. D., New York City; P. H. S. Vaughan, M. D., Bangor, Maine; Malcolm H. Yeaman, M. D., Lakeland, Ky.

THE PRESIDENT.—The names of those recommended for election to membership will lie upon the table until to-morrow morning, in accordance with the Constitution. The other names will be referred to the Council for final action next year.

The report of the Treasurer of the American Medico-Psychological Association for 1905-1906 was then read as follows:

RECEIPTS.

Balance on hand	$1,876.89
Dues from Active Members	1,409.90
Dues from Associate Members	245.15
Interest	59.16
Sale of Gummed Lists	7.50
Sale of Transactions	1.00
Sale of Blackburn's Autopsies	1.50
Sale of Index Medicus	5.00
Total Receipts	$3,606.10

EXPENDITURES.

Printing and Publishing Transactions, 1904	$ 934.88	
Silver Loving Cup, Dr. Hurd	100.00	
American Journal of Insanity, annual appropriation	200.00	
Postage, including mailing Transactions for 1904 and 1905	179.54	
Expressage for 1904 and 1905	26.28	
Clerical Assistance	65.00	
Programs and Circulars, meeting 1905	15.50	
Programs and Circulars, meeting 1906	14.75	
Printing and Stationery	19.30	
Receipt Book	3.75	
Traveling Expenses, stenographer attending San Antonio meeting	63.55	
Expenses stenographer attending special meeting of Council in N. Y., and one trip to Poughkeepsie	4.15	
Telegrams	25.22	
Typewriting, Postage, etc. Committee on Program	11.40	
Apportionment of expenses, of Committtee of International Congress	25.00	
Bank Exchange, charges on foreign checks	1.36	
Freight	.91	
Balance on Hand	1,915.51	
		$3,606.10
Dues unpaid:		
Active Members	$ 370.00	
Associate Members	70.00	
Total	$ 440.00	

Respectfully submitted,
(Signed) CHAS. W. PILGRIM,
Treasurer.

THE PRESIDENT.—If there be no objection, the report of the Treasurer will be accepted and referred to the Auditors. The Chair hears no objection and the report is so referred.

The report from the editors of the American Journal of Insanity was read by Dr. Henry M. Hurd, who said that he regretted to report that Dr. Brush, the managing editor of the Journal, was prevented from being present by the sudden and serious illness of a member of his staff and consequently he read the report, which had been prepared.

DR. HURD.—Mr. President, I have the honor also of presenting the vouchers of the Journal for the past year.

On motion, the report of the editors was accepted and ordered spread on the minutes of the Association and the financial portion thereof referred to the Auditors.

THE PRESIDENT.—The Chair appoints the following named gentlemen as the Nominating Committee:

Dr. Richard Dewey, of Wisconsin.

Dr. Edward Cowles, of Massachusetts.

Dr. T. O. Powell, of Georgia.

I will now announce a recess of fifteen minutes for registration. It is requested that all those present, whether members or visitors, register their names with the Secretary.

The following members registered as being in attendance during the whole or a part of the meeting:

Abbot, E. Stanley, M. D., Assistant Physician, McLean Hospital, Waverley, Mass.

Adams, George S., M. D., Superintendent, Westborough Insane Hospital, Westborough, Mass.

Allen, Henry D., M. D., Medical Director, Allen's Invalid Home, Milledgeville, Ga.

Anglin, James V., M. D., Medical Superintendent, The Provincial Hospital, St. John, New Brunswick.

Applegate, Charles F., M. D., Superintendent, Mt. Pleasant State Hospital, Mt. Pleasant, Iowa.

Atkins, Henry S., M. D., Medical Superintendent, City Insane Asylum, St. Louis, Mo.

Ayer, James B., M. D., Massachusetts State Board of Insanity, 518 Beacon Street, Boston, Mass.

Baker, Jane Rogers, M. D., Superintendent, Chester County Home and Hospital for the Insane, Embreeville, Pa.

Baldwin, Henry C., M. D., 126 Commonwealth Avenue, Boston, Mass.

Bancroft, Charles P., M. D., Superintendent, New Hampshire State Hospital, Concord, N. H.

Bartlett, P. Challis, M. D., Assistant Physician, Worcester Insane Asylum, Worcester, Mass.

Beemer, Nelson H., M. D., Medical Superintendent, Mimico Asylum for Insane, Toronto, Ont.

Beutler, W. F., M. D., Superintendent, Asylum for Chronic Insane, Wauwatosa, Wis.

Blumer, G. Alder, M. D., Medical Superintendent, Butler Hospital, Providence, R. I.

Brooks, Ida J., M. D., Assistant Physician, Westborough Insane Hospital, Westborough, Mass.

Brownrigg, A. E., M. D., Medical Superintendent, Highland Spring Sanitorium, Nashua, N. H.

Buchanan, J. M., M. D., Superintendent East Mississippi Insane Hospital, Meridian, Miss.

Burgess, T. J. W., M. D., Medical Superintendent, Protestant Hospital for Insane, Box 2381, Montreal, Quebec.

Burr, C. B., M. D., Medical Director, Oak Grove Hospital, Flint, Mich.

Caples, Byron M., M. D., Medical Superintendent, Waukesha Springs Sanitarium, Waukesha, Wis.

Carlisle, Chester Lee, M. D., Assistant Physician, Willard State Hospital, Willard, N. Y.

Carriel, Henry B., M. D., Superintendent, Illinois Central Hospital for the Insane, Jacksonville, Ill.

Clark, J. Clement, M. D., Superintendent, Springfield State Hospital, Sykesville, Md.

Clarke, Charles K., M. D., Superintendent, Toronto Asylum, 999 Queen Street, W., Toronto, Ont.

Coe, Henry Waldo, M. D., Medical Director, Crystal Springs (Mind-ease), Portland, Ore.

Coleburn, Arthur B., M. D., Assistant Physician, Connecticut Hospital for Insane, Middletown, Conn.

Coles, William W., M. D., Assistant Physician, Westborough Insane Hospital, Westborough, Mass.

Copp, Owen, M. D., Secretary and Executive Officer, Massachusetts State Board of Insanity, Room 36, State House, Boston, Mass.

Coriat, Isador H., M. D., Assistant Visiting Physician, Nerve Department Boston City Hospital and Mt. Sinai Hospital, Warren Chambers, 419 Boylston Street, Boston, Mass.

Cowles, Edward, M. D., 419 Boylston Street, Boston, Mass.

Dewey, Richard, M. D., Physician in Charge, Milwaukee Sanitarium, Wauwatosa, Wis.

Dewing, O. M., M. D., Medical Superintendent, Long Island State Hospital, Brooklyn, N. Y.

Dill, D. M., M. D., Superintendent, Essex County Hospital for the Insane, 425 South Orange Avenue, Newark, N. J.

Drew, Charles A., M. D., Medical Director, Massachusetts State Asylum for Insane Criminals, State Farm, Mass.

Edenharter, George F., M. D., Medical Superintendent, Central Indiana Hospital for Insane, Indianapolis, Ind.

Edgerly, J. Frank, M. D., 1 Mt. Vernon Terrace, Newtonville, Mass.

Elliott, Robert M., M. D., Medical Superintendent, Willard State Hospital, Willard, Seneca County, N. Y.

Evans, Britton D., M. D., Medical Director, The New Jersey State Hospital at Morris Plains, Morris Plains, N. J.

Eyman, Henry C., M. D., Medical Superintendent, Massillon State Hospital, Massillon, Ohio.

French, Edward, M. D., Superintendent, Medfield Insane Asylum, Medfield, Mass.

Frost, Henry P., M. D., First Assistant Physician, Buffalo State Hospital, Buffalo, N. Y.

Fuller, Solomon C., M. D., Pathologist, Westborough Insane Hospital, Westborough, Mass.

Goodwill, V. L., M. D., Medical Superintendent, Prince Edward Island Hospital for the Insane, Charlottetown, P. E. I., Canada.

Gordon, W. A., M. D., Superintendent, Northern Hospital for Insane, Winnebago, Wis.

Gundry, Richard F., M. D., Medical Director, The Richard Gundry Home, Catonsville, Md.

Hall, Henry C., M. D., Assistant Physician, Butler Hospital, Providence, R. I.

Hancker, William H., M. D., Medical Superintendent, Delaware State Hospital, Farnhurst, Del.

Harding, George T., Jr., M. D., Superintendent, Washington Branch Sanitarium, No. 2 Iowa Circle, Washington, D. C.

Harmon, F. W., M. D., Superintendent, Longview State Hospital, Cincinnati, Ohio.

Harris, Isham G., M. D., First Assistant Physician, Hudson River State Hospital, Poughkeepsie, N. Y.

Hattie, William H., M. D., Medical Superintendent, Nova Scotia Hospital, Halifax, N. S.

Heyman, M. B., M. D., First Assistant Physician, Central Islip State Hospital, Central Islip, L. I., N. Y.

Hill, Charles G., M. D., Physician in Charge, Mt. Hope Retreat, Station E., Baltimore, Md.

Hill, Gershom H., M. D., Equitable Building, Des Moines Iowa.

Hitchcock, Chas. W., M. D., Attending Neurologist, Harper Hospital, 270 Woodward Avenue Detroit, Mich.

Hobbs, A. T., M. D., Medical Superintendent, Homewood Sanitarium, Guelph, Ont.

Hoch, Theodore A., M. D., First Assistant Physician, Worcester Insane Hospital, Worcester, Mass.

Houston, John A., M. D., Superintendent, Northampton State Hospital, Northampton, Mass.

Howard, Adams B., M. D., Superintendent, Cleveland State Hospital, Cleveland, Ohio.

Howard, Eugene H., M. D., Medical Superintendent, Rochester State Hospital, Rochester, N. Y.

Howard, Emily Pagelson, M. D., Massachusetts General Hospital, Boston, Mass.

Howard, Herbert B., M. D., Massachusetts General Hospital, Boston, Mass.

Hurd, Henry M., M. D., Superintendent, The Johns Hopkins Hospital, Baltimore, Md.

Hutchings, Richard H., M. D., Medical Superintendent, St. Lawrence State Hospital, Ogdensburg, N. Y.

Hutchinson, Henry A., M. D., Physician and Superintendent, Western Pennsylvania Hospital for the Insane, Dixmont, Allegheny County, Pa.

Jelly, George F., M. D., Chairman, Massachusetts State Board of Insanity, 69 Newberry Street, Boston, Mass.

Kilbourne, Arthur F., M. D., Medical Superintendent, Rochester State Hospital, Rochester, Minn.

Kinney, C. Spencer, M. D., Easton Sanitarium, Easton, Pa.

Klopp, Henry I., M. D., Asistant Superintendent, Westborough Insane Hospital, Westborough, Mass.

Knapp, John Rudolph, M. D., Assistant Physician, Manhattan State Hospital, Ward's Island, New York City.

Knowlton, Wallace M., M. D., Channing Sanitarium, Brookline, Mass.

Lamb, Robert B., M. D., Medical Superintendent, Matteawan State Hospital, Fishkill-on-Hudson, New York.

Langdon, F. W., M. D., Medical Director, Cincinnati Sanitarium, 5 Garfield Place, Cincinnati, Ohio.

Lyon, Samuel B., M. D., Medical Superintendent, Bloomingdale, White Plains, N. Y.

Lyons, A. J., M. D., Superintendent, Second Hospital for Insane, Spencer, West Virginia.

Mabon, William, M. D., Superintendent and Medical Director, Manhattan State Hospital, Ward's Island, New York City.

MacCallum, G. A., M. D., Medical Superintendent, Asylum for the Insane, London, Ont.

Macdonald, Alexander E., M. D., 431 Riverside Avenue, New York City.

Macphail, Andrew, M. D., Pathologist, Protestant Hospital for the Insane, 216 Peel Street, Montreal, Quebec.

McDonald, William, Jr., Clinical Director, Butler Hospital, Providence, R. I.

Macy, William Austin, M. D., Superintendent, Kings Park State Hospital, Kings Park, N. Y.

Meredith, Hugh B., M. D., Superintendent, State Hospital for the Insane, Danville, Pa.

Meyer, Adolf, M. D., Director, Pathological Institute New York State Hospitals, Ward's Island, New York City.

Miller, Harry W., M. D., Pathologist and Assistant Physician, Taunton Insane Hospital, Taunton, Mass.

Mitchell, H. W., M. D., Senior Assistant Physician, Danvers Insane Hospital, Hathorne, Mass.

Mitchell, Thomas J., M. D., Superintendent, State Insane Hospital, Asylum, Miss.

Moody, G. H., Physician in Charge, Dr. Moody's Sanitarium, San Antonio, Texas.

Mosher, J., Montgomery, M. D., Attending Specialist in Mental Diseases, Albany Hospital, Albany, N. Y.

Murphy, P. L., M. D., Superintendent, State Hospital at Morganton, Morganton, N. C.

North, C. H., M. D., Medical Superintendent, Dannemora State Hospital, Dannemora, N. Y.

Noyes, William, M. D., Superintendent, Boston Insane Hospital, Mattapan, Mass.

Orth, H. L., M. D., Superintendent and Physician, Pennsylvania State Lunatic Hospital, Pouch "A," Harrisburg, Pa.

Page, Charles W., M. D., Superintendent and Physician, Danvers Insane Hospital, Hathorne, Mass.

Palmer, Harold L., M. D., Superintendent, Utica State Hospital, Utica, N. Y.

Perry, Middleton L., M. D., Superintendent, Kansas State Hospital for Epileptics, Parsons, Kansas.

Pilgrim, Charles W., M. D., President, New York State Commission in Lunacy, Poughkeepsie, N. Y.

Powell, T. O., M. D., Superintendent, Georgia State Sanitarium, Milledgeville, Ga.

Pomeroy, E. H., M. D., Monterey, Tennessee.

Redwine, J. S., M. D., Medical Superintendent, Eastern Kentucky Asylum for the Insane, Lexington, Ky.

Rowe, John T. W., M. D., First Assistant Physician, Manhattan State Hospital, Ward's Island, New York City.

Scribner, Ernest V., M. D., Medical Superintendent, Worcester Insane Asylum, Box 1178, Worcester, Mass.

Searcy, James T., M. D., Medical Superintendent, The Alabama Insane Hospitals, Tuscaloosa, Ala.

Searl, William A., M. D., Medical Director, Fair Oaks Villa, Cuyahoga Falls, Ohio.

Shepherd, Arthur F., Superintendent, Dayton State Hospital, Dayton, Ohio.

Smith, George A., M. D., Superintendent, Central Islip State Hospital, Central Islip, L. I., N. Y.

Sprague, George P., Superintendent and Proprietor, Dr. Sprague's Sanitarium, Lexington, Ky.

Stockton, George, M. D., Superintendent, Columbus State Hospital, Columbus, Ohio.

Taylor, Isaac M., M. D., Superintendent and Resident Physician, Broadoaks Sanitorium, Morganton, N. C.

Thompson, W. N., M. D., Superintendent, Hartford Retreat, Hartford, Conn.

Tomlinson, H. A., M. D., Superintendent, St. Peter State Hospital, St. Peter, Minn.

Tuttle, George T., M. D., Medical Suprintendent, McLean Hospital, Waverley, Mass.

Wagner, Charles G., M. D., Medical Superintendent, Binghamton State Hospital, Binghamton, N. Y.

Wentworth, Lowell F., M. D., Deputy Executive Officer, State Board of Insanity, 36 State House, Boston, Mass.

White, M. J., M. D., Medical Superintendent, Milwaukee Hospital for Insane, Box "A," Wauwatosa, Wis.

White, Wm. A., M. D., Superintendent, Government Hospital for the Insane, Washington, D. C.

Wolfe, Mary M., M. D., Chief Physician, Women's Department, Norristown State Hospital, Norristown, Pa.

Woodbury, Charles E., M. D., Medical Superintendent, Foxboro State Hospital, Foxboro, Mass.

Woodson, C. R., M. D., Superintendent, State Hospital No. 2, St. Joseph, Mo.

Work, Hubert, M. D., Superintendent and Proprietor, Woodcroft Hospital, Pueblo, Colo.

Zeller Geo. A., M. D., Superintendent, Illinois Asylum for Incurable Insane, 1201 S. Bartonville, Peoria, Ill.

The following visitors and guests of the Association registered their names with the Secretary:

Abbot, Florence Hale, M. D., Assistant Physician, Taunton Insane Hospital, Taunton, Mass. "Drawer D."

Atkinson, Goodwin T., M. D., Member Board of Managers, Springfield State Hospital, Sykesville, Maryland.

Bailey, Alexander, M. D., Acting Superintendent, Western Kentucky Asylum, Hopkinsville, Ky.

Barnhardt, W. T., M. D., Toronto, Ont., Canada.

Burr, Annette W., Oak Grove Hospital, Flint, Mich.

Burr, Miss Ernestine, Flint, Mich.

Bliss, George S., M. D., Assistant Physician, Massachusetts School for Feeble Minded, Waverley, Mass.

Board, Milton, Member Kentucky State Board of Control, Western Kentucky Asylum for the Insane, Hopkinsville, Ky.

Bradt, Miss Cecelia K., McLean Hospital, Waverley, Mass.

Brantley, John T., Member Board of Trustees, State Sanitarium, Milledgeville, Georgia.

Brantley, Mrs. John T.

Briggs, L. Vernon, M. D., Physician to the Mental Department of the Boston Dispensary, 208 Beacon Street, Boston, Mass.

Buchanan, Mrs. J. M., Meridian, Miss.

Buhrman, E. Ray, M. D., Assistant Physician, Westborough Insane Hospital, Westborough Mass..

Caples, Mrs. Byron M., Waukesha, Wis.

Carlisle, Mrs. Chester Lee, Willard, N. Y.

Clark, Miss Margaret E., Waverley, Mass.

Clarke, Mrs. C. K., Toronto Asylum, Toronto, Ont., Canada.

Cogan, Joseph A., M. D., Warren Chambers, Boston, Mass.

Coles, Ruth Barker, M. D., Assistant Physician, Westborough Insane Hospital, Westborough, Mass.

Coriat, Mrs. Isador H., Worcester, Mass.

Cutter, Charles K., M. D., Somerville Associated Charities, 175 School Street, Winter Hill, Mass.

Dill, Mrs. D. M., Newark, N. J.

Doherty, Charles E., M. D., Medical Superintendent, British Columbia Public Hospital for Insane, New Westminster, B. C., Canada.

Drew, Mrs. Charles A., State Farm, Mass.

Dunbar, Mr. F. H., 150 Botolph Street, Boston, Mass.

Folin, Otto, Assistant in Chemistry, McLean Hospital, Waverley, Mass.

Fernald, Guy G., M. D., Second Assistant Physician, McLean Hospital, Waverley, Mass.

Fleming, Mark S., M. D., Assistant Physician, Hudson River State Hospital, Poughkeepsie, N. Y.

Flett, Penelope M., Florence Crittenden Home, Watertown, Waverley, Mass.

Franz, Shepherd I., Assistant in Pathology and Physiology, McLean Hospital, Waverley, Mass.

French, Mrs. Martha C., Medfield, Mass.

Gilbert, Miss Frances E., Robinwood Avenue, Jamaica Plain, Mass.

Graham, Dr. D., Boston, Mass.

Guild, His Excellency, Curtis, Jr., Governor of Massachusetts.

Haynes, Mary W., Waverley, Mass.

Heyman, Mrs. Marcus B., Central Islip, L. I., N. Y.

Hill, J. W., M. D., Medical Superintendent, Kentucky Feeble Minded Institute, Frankfort, Ky.

Hill, Mrs. J. W., Frankfort, Ky.

Holmes, David H., McLean Hospital, Waverley, Mass.

Holmes, Mrs. D. H., McLean Hospital, Waverley, Mass.

Hopkinson, Samuel W., Trustee Danvers Insane Hospital, Hathorne, Bradford, Mass.

Hutchings, Mrs. R. H., Ogdensburg, N. Y.

Hutchinson, Claribel M., 814 Main Street, Waltham, Mass.

Howard, Mrs. Eugene B., State Hospital, Rochester, N. Y.

Jones, E. Kathleen, McLean Hospital, Waverley, Mass.

Jordan, M. M., M. D., Junior Assistant Physician, Westborough Insane Hospital, Box 288, Westborough, Mass.

Love, Mrs. Andrew J., Chattanooga, Tenn.

MacCallum, W. G., M. D., Associate Professor of Pathology, Resident Pathologist, Johns Hopkins Hospital, Baltimore, Md.

McIntosh, Miss J., McLean Hospital, Waverley, Mass.

McGarr, Mr. T. E., Secretary, New York State Commission in Lunacy, Albany, N. Y.

Miller, Lottie H., Superintendent of Nurses, Westborough Insane Hospital, Westborough, Mass.

Miller, Gertrude Wright, Taunton, Mass.

Millspaugh, Daniel T., M. D., Medical Superintendent, Riverlawn Sanitarium, Paterson, N. J.

Niven, Nora E., McLean Hospital, Waverley, Mass.

Norton, Eben C., M. D., Superintendent, Private Hospital for Mental Diseases, Norwood, Mass.

Oosterbeek, J. G., M. D., Assistant Physician, Illinois Asylum for the Incurable Insane, 1201 South Bartonville, Peoria, Ill.

Packard, Frederic H., M. D., Assistant Physician, McLean Hospital, Waverley, Mass.

Packard, Mrs. F. H., Waverley, Mass.

Powell, Mrs. T. O., Milledgeville, Ga.

Ring, A. H., Superintendent, Arlington Health Resort, Arlington Heights, Mass.

Scribner, Mrs. E. V., Worcester, Mass.

Searl, Mrs. William A., Cuyahoga Falls, Ohio.

Shaw, Helma, 3 Rock Street, Middleboro, Mass.

Steele, S. M., M. D., Superintendent, West Virginia Hospital for the Insane, Weston, W. Va.

Tuttle, Abbie P., McLean Hospital, Waverley, Mass.

Tuttle, Sherburne B., McLean Hospital, Waverley, Mass.

Van Nuys, W. C., M. D., Medical Superintendent, Indiana Village for Epileptics, New Castle, Indiana.

Vaughan, P. H. S., M. D., Superintendent, Eastern Maine Insane Hospital, Bangor, Maine.

Woodward, L. E., Superintendent of Nurses, McLean Hospital, Waverley, Mass.

Woodworth, R. S., Adjunct Professor of Psychology, Columbia University, New York City.

Yeaman, Malcolm H., M. D., Medical Superintendent, Central Kentucky Asylum for the Insane, Lakeland, Ky.

Yeaman, Mrs. Malcolm H., Lakeland, Ky.

Younglove, John, M. D., Elizabeth, N. J.

The Association reconvened after the recess and was called to order by the Vice-President.

THE VICE-PRESIDENT.—We shall now have the pleasure of listening to the annual address of our President, who needs no introduction to this Association. (Applause.)

The President then read his address, "The Physician as a Character in Fiction," which was greeted with much applause.

Dr. Hill.—Gentlemen, you have given very close attention to the interesting address of our President. You have been presented with a very interesting kaleidoscopic view of ourselves and our profession in the eyes of literary genius.

Dr. Woodson.—I move that the Association extend a vote of thanks to the retiring President for this most interesting, progressive, and excellent address. Carried unanimously by a rising vote.

The President.—I thank you very much for your kind expression.

A recess was then taken until 2.30 p. m.

Second Session.

The meeting was called to order by the President at 2.30 p. m.

The President.—This Association has been favored from year to year by an address from some distinguished person, in its membership or out, on subjects in which we are interested. It gives me great pleasure to introduce to you Prof. Robert S. Woodworth, of Columbia University, who will deliver the annual address, entitled, "Psychiatry and Experimental Psychology."

Prof. Woodworth then read his address, which was greeted with much applause.

Dr. C. G. Hill.—I move that a vote of thanks be tendered Prof. Woodworth for his valuable and able address.

The President.—I am sure we will respond to that with cordial enthusiasm. Carried unanimously by a rising vote.

If there is no objection, we will now take a recess until 8.30 to-night. The Chair hears no objection.

A recess was then taken until 8.30 p. m.

Third Session.

The Association was called to order by the President at 8.30 p. m.

The President.—The Chair would announce that he has taken

the liberty of appointing Dr. Byron M. Caples to act as Auditor with Dr. Hancker, vice Dr. A. W. Hurd who is not here.

The action of the President was approved by unanimous consent.

The following papers were then read: "The Unity of Insanity," by Dr. H. A. Tomlinson, St. Peter, Minnesota, which was discussed by Drs. Hughes, Henry M. Hurd, and H. A. Tomlinson in closing; "Retrospective—Prospective," by Dr. H. C. Eyman, of Massillon, Ohio, which was discussed by the President and Dr. Hughes; "Deterioration and Practical Psychiatry," by Dr. John R. Knapp, of New York City, which was discussed by Dr. Tomlinson and Dr. Knapp in closing.

Dr. Henry M. Hurd.—At the last meeting of the Association, a committee was appointed to consider the subject of continued affiliation with the Congress of American Physicians and Surgeons. You may remember that under the arrangement made some four years ago, we became affiliated with this Congress, which meets in Washington once in three years.

At the last meeting in San Antonio, Dr. Macdonald made some statements in reference to the question of affiliation and it was thought desirable that a committee should be appointed to consider the question, and such a committee was appointed. I understand that the committee has not considered the question and is not prepared to report. Under the circumstances, then, I would move that this committee be discharged from any further consideration of the question.

Seconded by Dr. Hubert Work as a member of the committee and carried.

"What Shall We Do With the Drunkard," by Dr. Ezra B. Potter, Rochester, N. Y., was read by title.

Adjourned.

Wednesday, June 13, 10.00 A. M.

The meeting was called to order by the President.

The President.—I have received a letter from Dr. R. J. Preston, of Virginia, sometime President, who regrets that he cannot

attend this meeting of the Association. His presence, I am sure, is very much missed.

The following letter was read by the Secretary:

431 Riverside Avenue, New York City, June 13, 1906.

My Dear Doctor.—I have the honor to report that, in accordance with the assignment of the American Medico-Psychological Association, I attended the International Medical Congress at Lisbon on April 19-26, and presented my credentials as representing that Association.

Yours very truly,

(Signed) A. E. Macdonald.

Dr. C. B. Burr, Oak Grove Hospital, Flint, Mich.

The Secretary.—I have also received a letter from Dr. Macdonald saying he would be here to-morrow and make a report.

The President.—It will be necessary, I believe, to select a delegate and alternate to the Congress of American Physicians and Surgeons for the coming meeting. Inasmuch as there is no special order of business this will be taken up now if the Association pleases.

Dr. Henry M. Hurd.—I move that the Council be requested to appoint a member of the Executive Committee and an alternate for the Congress of American Physicians and Surgeons. Carried.

Dr. Mabon.—Mr. President: The British Medical Association meets in Toronto this year and inasmuch as Dr. A. E. Macdonald has represented us on other occasions, I move that he represent this Association at that meeting.

Dr. Mabon's motion was duly seconded and carried unanimously.

Dr. Beemer.—Mr. President: While on the subject of the British Medical Association meeting at Toronto, I would say that I have been asked by the President of the Association, and as a Vice-President of the Psychological Section, I join in the request, to request you to extend to the members of this Association a cordial invitation to attend that meeting, which will be held at Toronto in August.

The President.—I am sure, Dr. Beemer, that I voice the sentiment of the Association when I thank you for this very cordial invitation.

The next on the order of business is the election of members.

The Secretary read the list of physicians proposed for membership in the Association. (This list is given on pages 94 and 95.)

THE PRESIDENT.—You have heard the names of those proposed for honorary, active, and associate membership, and for reinstatement. The Constitution provides that this election shall be by ballot. What is the pleasure of the Association?

DR. MURPHY.—I move that the Secretary be instructed to cast the ballot of the Association for these physicians, electing them to membership. Carried.

THE PRESIDENT.—The Secretary announces that the ballot has been cast and the candidates elected. The names you have heard read will be placed on the rolls of the Association.

DR. MABON.—May I be permitted to call the attention of this Association to a matter of considerable importance in the care of the insane? In 1893, Dr. Wise, a member of this Association, presented a paper on the "After Care of the Insane." In 1894 and again in 1905, Dr. Richard Dewey, also a member of this Association, discussed the subject in papers read before the National Conference of Charities.

Dr. Henry R. Stedman, as chairman of a committee of the American Neurological Association on the after care of the insane, appointed in 1894, submitted and published a report in 1897. This he followed up by a paper before the National Conference of Charities and Correction and both these reports were published and distributed in pamphlet form. He collected much information of value from those who are interested in the care and treatment of the insane, particularly from those who are superintendents of institutions for mental disease.

No systematic efforts were made, I believe, to undertake this work until last fall, when the State Charities Aid Association of New York State, through the initiative of Miss Louisa Lee Schuyler, had a conference with the State Commission in Lunacy and the hospital superintendents and undertook to inaugurate the work. One After Care Committee has been formed in connection with the Manhattan State Hospital, and one with the Willard

State Hospital, and these committees are to be further extended to provide for the various hospitals of New York State.

The work that has been accomplished will be found in the report, a copy of which has been sent to the various superintendents throughout the country.

In view of the importance of this work, I would offer and move the adoption of the following resolutions:

WHEREAS, The State Charities Aid Association of New York has recently established a Committee on the After Care of the Insane, to work in co-operation with the State Hospitals for the Insane in that State, and to provide temporary assistance, employment and friendly aid and counsel for needy persons discharged from such hospitals as recovered, and

WHEREAS, In the opinion of the American Medico-Psychological Association, it is very desirable that there should be carried on in connection with all hospitals for the insane such a system of after-care; therefore,

Resolved, That the American Medico-Psychological Association expresses its gratification at the inauguration of this movement in the State of New York, and its earnest hope that similar work may be undertaken for hospitals for the insane generally.

DR. MABON.—I would like, if possible, to have an expression of opinion from such representatives of the different States as care to speak on this subject.

THE PRESIDENT.—This is a very meritorious work and I am sure this Association will feel pleasure in engaging in it. Dr. Mabon presents these resolutions and moves their adoption.

DR. HURD.—It seems hardly necessary to say a single word commending this resolution and I hope it will unanimously prevail. It is worthy the support of every member present. Those who have been connected with the treatment of the insane must have been distressed many times by the fact that patients discharged wholly recovered from the institutions often relapse and come back to them because of lack of suitable care and friendly counsel and aid at a time when these may be critically needed. For this reason, it seems to me that no more important subject has ever been brought before the Association than the best methods for promoting the after care of such patients. I have great pleasure, therefore, in seconding this motion, which I hope will be adopted.

DR. BURGESS.—I am heartily in agreement with this resolution. Scarcely a week passes but that I have one or more patients who might be discharged if we had some one to look after them and encourage them. But as it is they are sometimes held weeks or months after they could be discharged because they have no one to help them. It seems to me the women who are discharged could be assisted greatly by the women of Montreal, but unfortunately, those who have been dicharged are neglected, if not worse, by the members of their own sex.

It is the same with the men. They can get no employment; there is no one to give them a helping hand. If we had a society of this kind in our Province, I feel sure it would do a world of good. I heartily endorse the resolution offered by Dr. Mabon.

DR. GORDON.—Dr. Hurd spoke about those going home and Dr. Burgess spoke about people that apparently did not have any homes. This work, as I understand it is simply for those that are homeless.

DR. MABON.—Not at all. Some, indeed many, have homes that are not very suitable. The State Charities Aid Association has organized a committee to undertake the work and this committee has, as an agent, a trained nurse to investigate every case. This nurse receives from the institution a list of patients about to be discharged, if possible, some time in advance of the discharge. Then she visits the homes of these patients, sees what the conditions are, and if they are unsuitable, so reports and attempts to make suitable arrangements by which the individual patient may be provided with sufficient food, clothing and if possible employment, or such other means as may be nceessary to tide the individual over the critical period after discharge.

For those who have no homes, board is provided in private families until occupation is secured. Furthermore, if the patient should appear to be relapsing after two or three weeks, the nurse reports the fact to the institution and effort is then made to see the patient and have him returned to the hospital before there is a full return of the mental trouble.

Indeed, the general idea is oversight for all worthy patients and doing everything possible to provide against those conditions which oftentimes bring about a relapse.

DR. TOMLINSON.—Last year at the National Conference of Charities and Correction at Portland, Oregon, the subject of the after care of the insane was considered in the section of which I was chairman. This consideration, however, did not go beyond the general discussion of the subject. Later in the year, the subject of the after care of the insane was taken up in the State conference in Minnesota, and a tentative plan formulated somewhat like the plan recently adopted in New York.

It is the intention to get philanthropic people in every community interested in the welfare of patients discharged from the custody of the hospitals for the insane, and have them look after these people, helping them to start in the world again. The institution is to furnish the patient a letter of introduction, and the committee a synopsis of the history of the individual; so that his weakness and special tendencies may be known, and therefore guarded against. It will be the function of the different members of this committee to keep track of the individual, encourage him, and guard as far as possible against a recurrence of his mental malady.

Aside from the mental weaknesses to be guarded against in the individual, it is often necessary to protect him from his relatives; especially if he has property, and the relatives have profited financially by his absence from home.

DR. BLUMER.—I have never been more strongly impressed with the usefulness of the order "unfinished business" in our Association than this morning, when such a matter as the after care of the insane is brought up by Dr. Mabon and now promises, after so many years, to be carried to a successful issue. I hope the motion of Dr. Mabon will prevail. For my part, I shall be very glad to do all that is possible to make the proposition of after care known to the proper authorities in the State of Rhode Island.

While we are very much indebted to the mover for what he is doing in this great cause, I think it only fair that we should recognize the part played by Miss Lousia Lee Schuyler, of New York. That lady deserves to rank with Miss Dorothea L. Dix in the great work she has done for the insane, not only in New York State, but throughout the United States. Without Miss

DR. BURGESS.—I am heartily in agreement with this resolution. Scarcely a week passes but that I have one or more patients who might be discharged if we had some one to look after them and encourage them. But as it is they are sometimes held weeks or months after they could be discharged because they have no one to help them. It seems to me the women who are discharged could be assisted greatly by the women of Montreal, but unfortunately, those who have been dicharged are neglected, if not worse, by the members of their own sex.

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Schuyler, the State Care Act in New York never would have been passed, or, at least, its passage would have been greatly delayed, and so long as she, through the State Charities Aid Association, is willing to undertake this work in conjunction with the State Commission in Lunacy we ought all, I think, to rejoice that, after thirteen years of talk, we are likely to have an after care association.

THE PRESIDENT.—These resolutions are before you for action.

The resolutions were adopted unanimously.

The report of the Auditors was submitted by Dr. Hancker:

BOSTON, MASS., June 13, 1906.

To the American Medico-Psychological Association:

Your Auditing Committee would respectfully report that it has made a careful examination of the books and accounts of the Treasurer, compared the receipts, disbursements and vouchers for same, and the funds on hand and in bank, and find that the report submitted by him is a true statement of the financial condition of the Association.

We have also in like manner examined the statement as submitted of receipts and disbursements by the editors of the American Journal of Insanity and find the report as presented to the Association correct.

Very respectfully,

(Signed) WM. H. HANCKER,
B. M. CAPLES,
Auditors.

I would like to make the suggestion, if it meet with the approval of the Association, of the necessity of changing the Constitution on account of the amount of work devolving upon the Auditors. Any one who has been an Auditor and who has performed his duties in a satisfactory manner, finds that the time taken up by that work requires from four to five hours. I would request that a resolution be introduced at this meeting, so it can be acted on next year, increasing the number of Auditors to three, electing one for one, one for two, and one for three years, and electing one annually thereafter, to hold office for three years, so that when an Auditor drops out, there will be some one who is familiar with the work. I hope some member will introduce a resolution to this effect.

The report of the Auditors and Treasurer was then received, adopted, and placed on file.

THE PRESIDENT.—It would seem to be a favorable time to carry out this suggestion, if any one cares to make the motion.

DR. J. C. CLARK.—I offer the following amendment to the Constitution:

Article 4, third line: Substitute the word "three" for "two" before the word "auditors."

Amendment to Article 8, second paragraph, ninth line: Insert after the word "elected," "One auditor shall be elected for one year, one for two years, and one for three years."

THE PRESIDENT.—This proposed amendment to the Constitution will lie upon the table until the next annual meeting.

DR. TUTTLE.—I would like to call the attention of the Association to the fact that there is an exhibit of the Massachusetts State Hospitals in the old Medical School building, Boylston street, corner of Exeter. The Medical School building is against the back of the Public Library.

One other thing. There appears to be some misunderstanding in regard to the invitation to Waverley. Of course all the ladies are expected to go, as well as members of the Association.

Dr. C. P. Bancroft, Concord, N. H., then read a paper, entitled, "Women Nurses on Men's Wards."

THE PRESIDENT.—The discussion of these nursing papers will take place at the end of the symposium. The Chair does not wish to be in the position of interrupting speakers unless it is the desire of the Association to have the twenty-minute rule enforced. What is the will of the Association?

DR. BLUMER.—I hope, Mr. President, you will be encouraged in the effort to enforce the rule. I think on an occasion like this, while we may love the members much, we should love the Association and its rules more. I, for my part, desire to offer my support and hope the President will succeed in his effort to be thoroughly vertebrate.

DR. WORK.—I move that the Chair be instructed to strictly enforce the twenty-minute rule.

The motion of Dr. Work was duly seconded and carried.

Dr. George T. Tuttle, Waverley, Mass., read a paper entitled, "The Male Nurse."

Dr. C. R. Woodson, of St. Joseph, Mo., read a paper entitled, "Night Nurses for the Insane."

Dr. Edward B. Lane, Boston, Mass., read a paper, "The Training School in the Insane Hospital."

The paper of Dr. W. P. Crumbacker, Independence, Iowa, "Musings Concerning Nurses in Hospitals for the Insane," was read by title.

The symposium on nursing was discussed by Drs. Stockton, Lyon, Cowles, C. K. Clarke, Burgess, Tomlinson, W. A. White, C. G. Hill, E. H. Howard, Hughes, Zeller, and by Drs. Bancroft, Tuttle, Woodson, and Lane in closing.

DR. W. A. WHITE.—I move that the President appoint a committee of three, to be known as the Committee on Training Schools, whose duty shall be to prescribe a minimum requirement in a course of study in training schools for nurses in hospitals for the insane and that the diplomas issued by those hospitals which, in the judgment of the committee, satisfy the requirements, shall be accepted in other hospitals for the insane.

The motion was duly seconded and carried.

THE PRESIDENT.—The Chair will appoint the committee later.

The report of the Nominating Committee was read by Dr. Richard Dewey, as follows:

For President, Dr. Charles G. Hill, of Maryland.

For Vice-President, Dr. Charles P. Bancroft, of New Hampshire.

For Secretary and Treasurer, Dr. Charles W. Pilgrim, of New York.

For Councilors, Dr. P. L. Murphy, of North Carolina; Dr. Wm. A. White, of Washington, D. C.; Dr. Robert H. Chase, of Pennsylvania; Dr. H. C. Eyman, of Ohio.

For Auditors, Dr. Geo. F. Edenharter, of Indiana; Dr. J. Percy Wade, of Maryland.

(Signed) RICHARD DEWEY,
EDWARD COWLES.
T. O. POWELL.

Upon motion the report of the committee was accepted and the Secretary was instructed to cast the ballot of the Association for the election of the officers named by the Nominating Committee.

THE PRESIDENT.—The Secretary announces that the ballot has been cast. These gentlemen will constitute the officers of the Association for the coming year. The Councilors and Auditors assume their offices at once.

The Association took a recess until 2.30 p. m.

SECOND SESSION.

The Association was called to order by the President at 2.30 p. m.

THE PRESIDENT.—I have just received notice of the death of Dr. George I. McLeod, of Pennsylvania. A memorial notice will be prepared for insertion in the next volume of the Transactions.

Dr. Samuel B. Lyon, White Plains, N. Y., read a paper, "Miscarriage of Habeas Corpus Proceedings," which was discussed by Drs. Mabon, Blumer, and by Dr. Lyon in closing.

Dr. George A. Smith's paper, "Colony System in New Hospitals for the Insane," was read by title.

Dr. Owen Copp, Boston, Mass., read a paper entitled, "Further Experience in Family Care of the Insane" which was discussed by Drs. Hurd, G. H. Hill, Pilgrim, McBride, Dewey, and Dr. Copp in closing.

A paper by Dr. Everett Flood, Palmer, Mass., "An Institution Composite," was read by title.

Dr. J. Clement Clark, Sykesville, Md. read a paper, "European Hospitals for the Insane."

DR. LANGDON.—The paper I read will have the merit of brevity and is simply an abstract of some investigations which we have in progress at the Cincinnati Sanitarium and simply announces the general results, so far as they have gone. The title is, "Paresis; A Research Contribution to its Bacteriology."

Dr. Langdon's paper was discussed by Drs. Eyman, Woodson, and by Dr. Langdon in closing.

THE PRESIDENT.—It seems to me the appointment of a Committee on Resolutions should be made at once. What is the pleasure of the Association?

The President was thereupon authorized by motion to appoint a Committee on Resolutions consisting of three members.

THE PRESIDENT.—The Chair will appoint as such committee, Drs. Hurd, Mosher, and McBride.

It seems to me in looking the matter over that the committee proposed by Dr. White this morning for considering the curricula of training schools, etc., should be larger. There is so much good material to enter into its composition that I am very much in favor of enlarging the committee to five, if this meets with the approval of the Association.

On motion the President's suggestion in this matter was adopted.

THE PRESIDENT.—I will appoint as such committee Drs. W. A. White, C. P. Bancroft, G. T. Tuttle, Arthur W. Hurd, and C. K. Clarke.

DR. C. G. HILL.—Last year a committee was appointed on program to arrange the program for the coming session. I think that was intended to be permanent. I have not heard any report of the committee. I would like to know whether that becomes permanent, or whether temporary.

THE PRESIDENT.—The Secretary states that the committee was for the present year only.

DR. C. G. HILL.—I move that a committee of five be appointed to arrange the program for the next meeting. I think the committee did very valuable work this year. I think a committee representing the different sections of the country would be best. I move that the committee be appointed by the Chair.

Dr. Hill's motion was duly seconded and carried.

THE PRESIDENT.—The Chair will ask Dr. Hill to suggest the members of that committee at a later meeting.

DR. MURPHY.—I move that when we adjourn to-night, it be to meet at 9.30 to-morrow morning.

Dr. Murphy's motion was duly seconded and carried.

The Association took a recess until 8.30 p. m.

EVENING SESSION.

The meeting was called to order by the President at 8.30 p. m.

Dr. Walter G. Chase, Boston, Mass., gave an illustrated lecture, "Biographic Representation of Various Phases of Epilepsy, Athetosis, Gait of Paretics, etc."

THE PRESIDENT.—You have listened to this remarkably interesting demonstration by Dr. Chase. What is the pleasure of the Association?

DR. WAGNER.—Mr. President, I think the Association is under very great obligations to Dr. Chase and I move that a vote of thanks be tendered him for the entertaining and very instructive lecture which he has given us.

THE PRESIDENT.—I am sure that motion will meet with your approbation. I will call for a rising vote. Carried unanimously.

I have pleasure in saying, Dr. Chase, that this is unanimous. We are very much indebted to you.

Adjourned.

THURSDAY, JUNE 14, 9.30 A. M.

The following reports of the Council were read by the Secretary:

The Council recommends the following named physicians for active membership:

Frank L. Keith, M. D., Farmington, Mo.; William McDonald, M. D., Providence, R. I.; Daniel H. Calder, M. D., Provo, Utah.

The following applications for active membership were considered informally and final action deferred until next year in accordance with the Constitution:

W. W. Faison, M. D., Goldsboro, N. C.; Robert L. Gillespie, M. D., Portland, Ore.; Florence Hale Abbot, M. D., Taunton, Mass.; Eben C. Norton, M. D., Norwood, Mass.; Oscar R. Long, M. D., Ionia, Mich.; H. Louis Stick, M. D., Worcester, Mass.

THE PRESIDENT.—The names of physicians proposed for active membership will be voted upon to-morrow as provided in the Constitution.

The Council has appointed the following named physicians as a committee to confer with a similar committee of the British Medico-Psychological Association and endeavor to arrange a conjoint meeting of that Association with this Association two years hence, and to report at the next meeting of this Association: Dr. A. E. Macdonald, Chairman; Dr. Chas. P. Bancroft, Dr. Chas. W. Pilgrim, Dr. Edward N. Brush, Dr. T. J. W. Burgess.

On motion this portion of the report was accepted and adopted.

The Council recommends that the Association meet in Washington, D. C., next year in conjunction with the Congress of American Physicians and Surgeons, not to exceed three days, and that the balance of the time devoted to the annual meeting be spent in Norfolk, Va.

The following named physicians constitute the Committee of Arrangements: Dr. William A. White, Chairman; Dr. William F. Drewry, Dr. L. S. Foster, Dr. J. Clement Clark, Dr. Stewart Paton.

The Council recommends that the dues for the coming year for active members be five dollars and for associate members two dollars.

The Council recommends the appropriation of $300.00, or as much thereof as may be necessary, to the American Journal of Insanity.

On motion, the various recommendations of the Council were accepted and adopted.

DR. C. W. PAGE.—I would like to make a report. At the last annual meeting a committee was appointed, of which committee I was chairman, to procure a suitable testimonial to present to Dr. Henry M. Hurd in recognition of his services to the Association. I wish to report that the committee selected a loving cup and that cup was presented to Dr. Hurd several months since by a sub-committee, Dr. Hill, of Baltimore, being the chairman.

The report was accepted.

Dr. Richard Dewey, Wauwatosa, Wis., read a paper entitled "Some Suggestions for Construction of Small Psychopathic Hospitals, with a Sketch of Plans."

Dr. Dewey's paper was discussed by Drs. Bancroft, Searl, C. K. Clarke, and by Dr. Dewey in closing.

The following papers were read:

"The History and Use of the Term Dementia," by G. Alder Blumer, M. D., Providence, R. I.

"The Clinical Aspects of Paretic Dementia with Special Reference to Differential Diagnosis, etc.," by Dr. Irwin H. Neff, Pontiac, Mich., read by title.

"Dementia," by Dr. James T. Searcy, Tuscaloosa, Alabama.

"Experimental Studies in Dementia," by Dr. William McDonald, Jr., Providence, R. I.

DR. MCDONALD.—If I plead guilty to a small part of that in Dr. Blumer's paper which he has been kind enough to charge against me, I must insist that there has been reciprocal aid and I am delighted to find here the opportunity to acknowledge publicly my great indebtedness to him for his constant support and encouragement in the labors to which I refer briefly in the paper about to be read. I have only to state that he has patiently read and helpfully criticized more than 150 typewritten pages of preliminary notes besides having co-operated with enthusiasm in the clinical experiments forming the basis of the written observations.

I also wish to acknowledge my obligations to my colleague, Dr. Hall, for valuable assistance rendered during the progress of the work.

"The Prognosis and Treatment of Dementia," by Dr. Charles K. Clarke, Toronto, Ontario.

DR. CLARKE.—When I was asked to take part in this discussion, I regarded it as a great compliment until I began to think of the matter seriously, when I discovered that some enemy had wished me to write a book. The effort to condense this to a twenty-minute article has been a task that might easily be called herculean.

THE PRESIDENT.—Personally, I feel very much indebted to these authors for their excellent articles.

The symposium on dementia was discussed by Drs. Coriat, Hughes, Meyer, H. W. Miller, and by Drs. Blumer, Searcy, McDonald.

SECOND SESSION.

At the McLean Hospital, Waverley, Mass.

The Association was called to order by the President at 2.45 p. m.

The following papers were read:

By Dr. John T. W. Rowe, Ward's Island, New York City, "Is Dementia Praecox the 'New Peril' in Psychiatry?"

By Dr. Sanger Brown, Chicago, Ill., "Precocious Insanity," (by title).

By Dr. Chester L. Carlisle, Willard, N. Y., "Maniacal Conditions in Young Adults."

By Dr. Walter E. Fernald, Waverley, Mass., "The Moral Imbecile," (by title).

DR. PILGRIM.—Owing to the large number of papers, I will read my paper, "Insanity and Suicide," by title.

By Dr. David A. Shirres, Montreal, Quebec, "A Report of a Case of Feigned Insanity in a Murderer," (by title).

By Dr. Gershom H. Hill, Des Moines, Iowa, "Three Cases to Illustrate Mental Irresponsiblity for Crime," (by title).

By Dr. Chas. A. Drew, State Farm, Mass., "Some Problems in Psychiatry and Penology," which was discussed by Dr. G. H. Hill.

THE PRESIDENT.—I am sure we are much indebted to the authors for these excellent papers this afternoon.

The Association now stands adjourned to meet this evening at 8.30. After Dr. Clark's lecture, Mr. John Koren, an expert of the United States Census Bureau, will speak on the subject of a more uniform system of statistics for the insane hospitals of the country.

Third Session.

The Association was called to order by the President at 8.30 p. m.

Dr. L. Pierce Clark, New York City, gave an illustrated lecture, "Idiocy, Hysteria and Palsy in Classical Pictorial Art."

The President.—Dr. Clark, we are very much indebted to you for this delightful lecture.

On motion, a vote of thanks was tendered Dr. Clark.

By request of the President, Dr. Adolf Meyer, Director of the Pathological Institute, Ward's Island, New York City, continued a discussion of the papers on dementia and gave demonstration of the methods of work of the New York State Pathological Institute.

The President.—I will not ask for a discussion of this subject. Dr. Meyer will be glad to answer questions, I know. We certainly owe him thanks for the demonstration this evening and I know I voice the sentiment of the Association in tendering them.

Mr. John Koren, an expert in the Census Bureau of the United States, was introduced.

Mr. Koren.—I have no excuse for being here, except that I had charge of the last Federal enumeration of the insane and had correspondence with most of the members of the Association.

Mr. Koren then read a paper entitled, "Statistics of the Insane."

The President.—We feel very much indebted to Mr. Koren for his talk to us to-night. What is the pleasure of the Association?

Dr. Wm. A. White.—I think Mr. Koren does not know it was largely through a visit I made to the Census Bureau that resulted in his being here to-night.

The statistics of insanity for the past two censuses have been interesting and I called upon the Bureau to see if the statistics

were in for this last census. One of the gentlemen took me through and showed me the various tabulated statements about to go to press. I was struck with the fact of the almost entire lack of uniformity in the reports of the different institutions. I could see very readily how the great mass of data might be and was in some instances absolutely ruined by there being no uniformity of procedure in the hospitals, so that the Bureau was handicapped to a great extent in dealing with them.

Mr. North, Director of the Census, told me the census returns were woefully behind the returns on the Continent.

It struck me it would be an excellent idea to have Mr. Koren, who is a resident of Boston, drop in and tell us something about this, and it would be an excellent thing to have this Association take the initiative in the endeavor to help the Census Bureau by providing them with statistics along the line which Mr. Koren has designated.

I believe it would be very desirable for the Association to appoint a committee to deal with this subject and operate in conjunction with the Census Bureau, advise with them and be able to place at the disposal of this Association and the different institutions the results, and give us material and information which is not only valuable, but presents studies of the problems which are arising in a country which is receiving so many of the offscourings of Europe.

I move, Mr. President, that the Chair appoint a committee of five, to deal with the subject as I have suggested, and that this committee should be representative of the different sections of the United States.

Dr. White's motion was duly seconded and carried.

MR. KOREN.—I might state that the last report of the Census Bureau regarding the insane in the United States is in press and will be published in a month or two. I have made arrangements to have a copy presented to every institution, public or private, represented in that book. We would be very glad to receive any criticisms or complaints, or any suggestions for future work of this kind.

THE PRESIDENT.—The Chair will appoint as this committee to co-operate with the Census Bureau the following: Dr. William A. White, Chairman, Washington, D. C.; Dr. William F. Drewry, of Virginia; Dr. Edmund A. Christian, of Michigan; Dr. James H. McBride, of California; Dr. Ernest V. Scribner, of Massachusetts, and Dr. Adolf Meyer, of New York City, as advisory member.

In this connection, I might add that Dr. White has expressed a wish to withdraw from the Committee on Training Schools. If there is no objection, the Chair will fill the vacancy caused by his retirement by the appointment of Dr. William L. Russell, of New York, and will appoint Dr. George T. Tuttle, of Massachusetts, as chairman of the committee.

On motion, the appointments of the Chair were confirmed.

Adjourned.

FRIDAY, JUNE 15, 9.30 A. M.

The Association was called to order by the President at 9.30.

THE PRESIDENT.—The first order of business is the election of the candidates proposed by the Council yesterday. The Secretary will read the names.

The Secretary read the following: Dr. Frank L. Keith, Farmington, Mo.; Dr. William McDonald, Jr., Providence, R. I.; Dr. D. H. Calder, Provo, Utah, as candidates for active membership.

On motion the Secretary was directed to cast the ballot of the Association electing these gentlemen as members of the Association.

THE PRESIDENT.—The Secretary announces that the ballot has been cast and I therefore declare these physicians members of the Association.

DR. A. E. MACDONALD.—There has been some misunderstanding with regard to the committee to consider the relations of this Association with the Congress of American Physicians and Surgeons. The committee was discharged in the absence of myself, the chairman, and other members of the committee, the impres-

sion being, as I have been informed, that I would not attend this meeting, whereas my letter to the Secretary stated only that I could not attend until the third day of the meeting.

I rise to a question of privilege and ask that, inasmuch as, through this misunderstanding, the committee has not been heard from, some member who voted for the discharge of the committee will kindly move a reconsideration so that the committee can make its report.

DR. BLUMER.—I move that the action of the Association in discharging this committee be reconsidered.

Dr. Blumer's motion was duly seconded and carried.

DR. A. E. MACDONALD.—As chairman of that committee, Mr. President, I have now to report that a meeting was held yesterday, a majority, Drs. Burgess, Work, and myself being present. The object of the committee's appointment was to enquire as to the relations with the Congress and to advise this Association whether that relation should continue or not. There was some trouble about the method of the collection of the share of this Association in the expenses of the last meeting. The rule provided that each constituent association should be taxed its proportion of the expenditure, in proportion again to the membership of such individual association.

In the case of the last meeting, however, it was assumed by the officers of the Congress that every member of an association who attended his own association meeting was thereby made a member of the Congress and was expected to pay to the Congress an additional fee of five dollars.

This was not understood by our members. A great many thought that membership in the Congress was optional and did not pay this fee, and as a consequence, afterward there was a deficit and the Association was taxed two hundred dollars to make it good.

The committee thinks that the rule should be enforced in a different way; that after the liability of each constituent society is determined, it should be left to that individual society to decide in what way that assessment should be paid, whether out of the

funds of the association, whether by individual subscription, or in any other way that the association should elect.

The committee's report, and recommendation, then, is that the relations now existing be continued, at least until the next meeting, at which time we will all be better qualified to judge of the value of the alliance.

The committee further recommends to the Association that its member of the Executive Committee of the Congress be instructed to advocate in that committee a method of collection of the regular assessment, which will leave the decision of the exact manner in the hands of the Association itself.

DR. BLUMER.—Mr. President, I move the adoption of the report and the discharge of the committee.

Dr. Blumer's motion was duly seconded and carried.

DR. A. E. MACDONALD.—Mr. President, I have another committee to report for, that upon the responsibility of the insane for criminal acts. At the last meeting, as you will remember, the committee was continued and I, as chairman, was instructed to communicate with the American Bar Association and endeavor to secure the appointment of a similar committee from that Association, so that the question could be considered in common and a general report made, if possible, at the Washington meeting next year. I have held such correspondence and have every reason to think that the joint committee will be appointed. I therefore report progress and ask the committee's continuance.

On motion, the report was accepted and the committee continued.

DR. A. E. MACDONALD.—Mr. President, I have still another report to make. I have just returned from Lisbon, where I attended the Fifteenth International Medical Congress as your representative. I have not had time since my return to prepare a detailed report. I will ask you to accept my verbal report as to the fact of my attendance and permit me to make the formal report through the agency of the American Journal of Insanity.

I learn that prior to my arrival at this meeting, you have done me the honor of selecting me as your representative at the British

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I learn that prior to my arrival at this meeting, you have done me the honor of selecting me as your representative at the British

Medical Association meeting this year in Toronto. I desire to thank you very kindly for this continued confidence and trust in myself as your representative.

On motion the report was accepted and placed on file.

Dr. S. C. Fuller, Westborough, Mass, read a paper, "The Neurofibrils in General Paralysis of the Insane, with Similar Comparative Studies in Other Psychoses," which was discussed by Drs. H. W. Miller, and by Dr. Fuller in closing.

Dr. Henry C. Baldwin, Boston, Mass., read a paper, "The Similarity in Symptoms in Cases of Tumor of the Brain and General Paralysis." At the close of his paper, Dr. Baldwin exhibited two patients as illustrating certain points of his paper.

THE PRESIDENT.—We owe Dr. Baldwin thanks for this clinic, so unusual in this Association. This most interesting paper is now open for discussion.

Dr. Baldwin's paper was discussed by Drs. Coriat, Blumer, and by Dr. Baldwin in closing.

"Family Epilepsy," by Dr. W. P. Spratling, Sonyea, N. Y., was read by title.

Dr. M. L. Perry, Parsons, Kansas, read a paper on "Status Epilepticus," which was discussed by Drs. Coriat, Hughes, and by Dr. Perry in closing.

"Some Observations on the Medical Treatment of Insanity," by Max E. Witte, M. D., Clarinda, Iowa, was read by title.

Dr. Edward French, Harding, Mass., read a paper on the "Condition of the Heart in Dements," which was discussed by Dr. Hughes.

A paper on "Cerebral Arterio-Sclerosis" was read by Dr. James B. Ayer, Boston, Mass.

"Mal-Assimilation as a Causative Factor," by Dr. J. Frank Edgerly, Newtonville, Mass., was read by title.

"The Care of the Tubercular Insane at the Kings Park State Hospital," by Dr. John Irvine McKelway, Kings Park, N. Y., was read by title.

The following papers were read:

"Clinical and Pathological Report of a Case of Addison's Disease, with Terminal Mental Symptoms," by Dr. Harry W. Miller, Taunton, Mass.

"The Cerebellar-Vestibular Syndrome," by Dr. Isador H. Coriat, Worcester, Mass.

Dr. Coriat's paper was discussed by Dr. Hughes.

"Hysterical Insanity—Report of a Case Presenting Ganser's Symptom Complex," by Dr. Henry P. Frost, Buffalo, N. Y., was read by title.

"The Polyneuritic Psychosis or Korsakoff's Disease with Clinical and Pathological Reports of Two Cases," by Chas. K. Mills, M. D., and A. Reginald Allen, M. D., of Phiadelphia, Pa., was read by title.

"The Opium Habit and Why Its Victims Are Growing More Numerous," by Dr. B. D. Evans, Morris Plains, N. J., was read by title.

"Recent Methods in the Care and Treatment of the Insane," by Dr. George B. Campbell, New York City, was read by title.

"Contribution to the Study of the Heredo-Alcoholics," by Dr. E. P. Chagnon, Montreal, Quebec., was read by title.

The following paper was read:

"Curable Neurasthenic Senile Dementia," by Dr. C. H. Hughes, St. Louis, Mo.

Dr. Hughes.—The purpose of this paper is to establish a point. I sent in my proposition to write a paper so late that I did not suppose I would find any space at all on this program. I wish to make this point, however, because I consider it from my own experience a vital one. The title is, "Neurasthenic and Functional Dementia of Seniles."

A paper on "Melancholia and Mania" was read by Dr. Edward Cowles, Boston, Mass.

Memorial notices were read by title, as follows:

Dr. Emmet Cooper Dent, by Wm. Austin Macy, M. D.

Dr. Benjamin Blackford, by William F. Drewry, M. D.

Dr. Henry P. Stearns, by Shailer E. Lawton, M. D.

Dr. William M. Edwards, by C. B. Burr, M. D., and Herman Ostrander, M. D.

Dr. Charles H. Langdon, by Charles W. Pilgrim, M. D.

Dr. D. D. Richardson, by Morris Guth, M. D.

The Committee on Resolutions reported as follows:

The Committee on Resolutions suggests that the Association recognize by a vote of thanks appreciation of the care taken by the Committee of Arrangements in preparing a most agreeable and pleasant meeting; and that this action include the officers of the McLean Hospital for the entertainment of Thursday afternoon, by which opportunity was given for the inspection of this progressive and beautiful institution. The committee feels particularly that Dr. Tuttle, in his dual capacity of host at the McLean Hospital and the resident member of the Committee of Arrangements has earned the gratitude of the Association.

The comfort of the members was much increased by the proprietors of the Hotel Vendome placing a meeting room at their disposal and also in arranging a special dining room for their convenience and our thanks are tendered for these and many other attentions.

(Signed) HENRY M. HURD,
J. M. MOSHER,
JAS. H. MCBRIDE.

On motion, the report of the Committee on Resolutions was accepted and adopted.

THE PRESIDENT.—The introduction of the President-elect is the next in order. I would request Dr. Macdonald and Dr. Burgess to escort Dr. Hill, the incoming President, to the Chair. (Applause.)

It is a work of supererogation to introduce to this Association one so well known and so popular as my friend at the right. It is, however, one of the requirements of this office and I accept the pleasant duty. It becomes my privilege and pleasure to yield this gavel to one worthy to wield it and to bespeak for him the

same courtesy and degree of consideration which I have received.

Members of the Association, permit me to present to you our silver-haired and silver-tongued orator and friend, Dr. Charles G. Hill, President-elect. (Applause.)

DR. HILL.—My words fail me when I attempt to express my feelings, and my very high appreciation of this great honor conferred upon me. When I count the long list of predecessors, the long list of distinguished men who have occupied this place, some living, many dead, I feel every sense of my responsibility and also very deeply this distinction which you have given me.

I am sure you have something to say in regard to our retiring President, so courteous, so affable, so efficient in his administration, and so popular to this entire body. Any motion you have to make will be in order.

DR. HUGHES.—I move that the thanks of this Association be given to the retiring President for the very satisfactory manner in which he has conducted the affairs of the Association.

Dr. Hughes' motion was duly seconded and carried unanimously by a rising vote.

THE PRESIDENT.—Is there no further business before the Association?

DR. BURGESS.—I think it also behooves us to give a cordial vote of thanks to our Secretary for the courteous way he has performed his duties and the time he has given to the affairs of the Association.

DR. BURR.—And to the Program Committee also.

The suggestions of Drs. Burgess and Burr were incorporated in a motion which was carried unanimously.

DR. BURR, in response to a call to make a few remarks, said:

I fear, Mr. President, the Association has already heard from me too much, but I do appreciate from the bottom of my heart the honor you have paid me in the election for a number of years

as Secretary and for the later honors of election to the offices of Vice-President and President. It has been a great privilege to serve the Association in these various capacities. I have enjoyed the work and I feel under no end of obligation for your courtesy to me, your kindness, your forgetfulness of my shortcomings, and your consideration for me, particularly during this late meeting. I thank you, Mr. President and gentlemen. (Applause.)

THE SECRETARY.—Gentlemen, I can only say that I thank you very much for the confidence you have imposed in me. If I can only perform the duties assigned to me one-half as well as my lamented predecessor, Dr. Dent, I shall be happy indeed.

THE PRESIDENT.—The Program Committee for the coming year will consist of the following members:

William L. Russell, M. D., Chairman, Poughkeepsie, N. Y.
Harry W. Miller, M. D., Taunton, Mass.
James V. Anglin, M. D., St. John, N. B., Canada.
William H. Hancker, M. D., Farnhurst, Del.
Arthur F. Kilbourne, M. D., Rochester, Minn.

Gentlemen, if there is no further business before the Association, it now stands adjourned to meet in Washington and Norfolk at a time to be announced later by the Secretary.

CHARLES W. PILGRIM,
Secretary.

Correspondence

Editors American Journal of Insanity:

A few days after writing you the letter published in your April issue I was sent by the State Lunacy Commission to Agnew to render temporary assistance to the wounded and the patients in general. My personal experience in San Francisco during the earthquake had not given me any realization of the horror of the catastrophe such as I had when climbing up to the third story of the wrecked building at Agnew and observing the torn-up state of floors and ceilings, the shattered condition of the walls, which have been in imminent danger of collapsing from the slight earthquake shocks which have followed the catastrophe of April 18th.

While at the institution I took a number of pictures of the ruins and of patients about the tents and elsewhere, prints of which I am sending you with this mail.[1] I was astonished to see how nicely the patients got along under the circumstances. Men and women who had been more or less constantly violent and untidy when confined in the building were now getting along peacefully, seldom quarreling, and showing more desire to keep clean than they had done when restricted to the limits of the building and airing courts. They all seemed more comfortable and contented in the tents and on the open grounds, where a nurse on guard here and there was the only restraining influence, and very few made attempts to escape. Only a few escaped during the confusion immediately following the catastrophe, and many worked like Trojans in the effort to rescue those caught in the wreck and in

[1] These photographs are very interesting, and eight of them have been reproduced to illustrate Dr. Hoisholt's letter. The cabin, referred to at the close of the letter, is illustrated in Fig. 3, Plate II. The whole series gives a clear illustration of the extent of the catastrophe.

caring for the wounded. The excitement had only started recurrent attacks in two or three cases—one of these was an epileptic who was one of the most energetic rescuers, working for hours until exhausted. The maniacal excitement which followed was the only pronounced acute attack present among some 770 patients when I reached there nine days after the earthquake. Immediately after the collapse of the different parts of the building there was of course excitement and fear among the patients, but it subsided in a short time. The record of the patients condition and conduct during the first two or three weeks of this enforced out-door life certainly speaks well for tent-treatment. Even the epileptics have had fewer attacks.

One of the pictures I have sent you shows a patient in a cabin which he had himself erected. Some twenty such small houses built with debris from the ruins by a certain class of the patients and scattered all over the lawns gave the grounds a peculiar appearance.

Very truly yours,

ANDREW W. HOISHOLT.

FIG. 1.

FIG. 2.

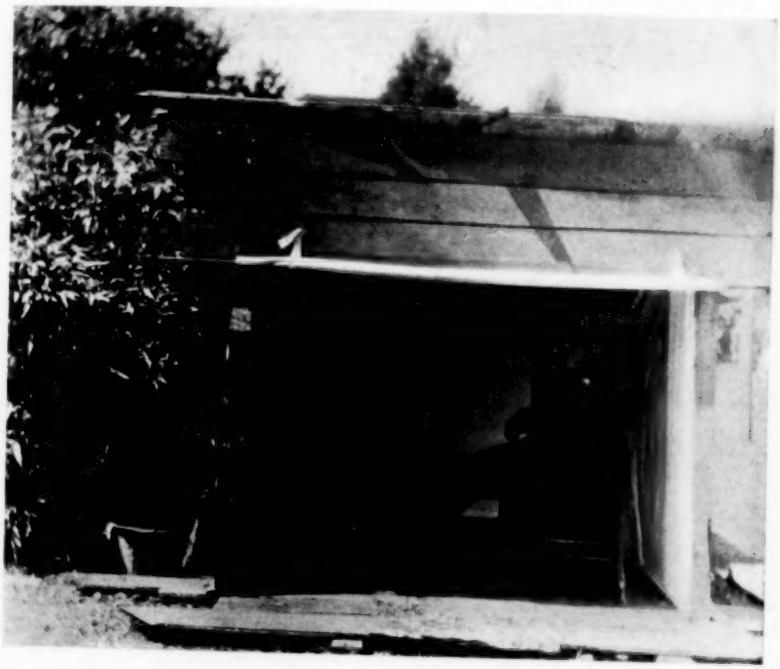

FIG. 3.

FIG. 4.

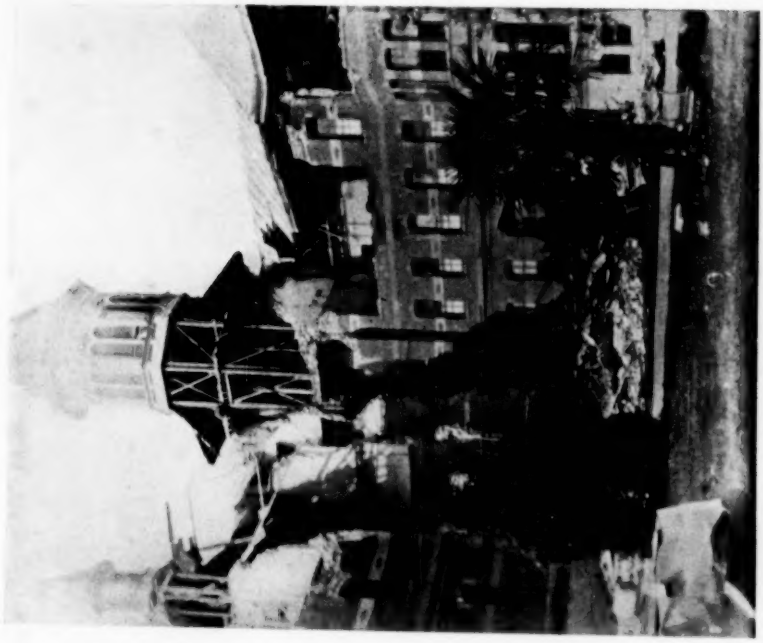

FIG. 6.

FIG. 5.

FIG. 7.

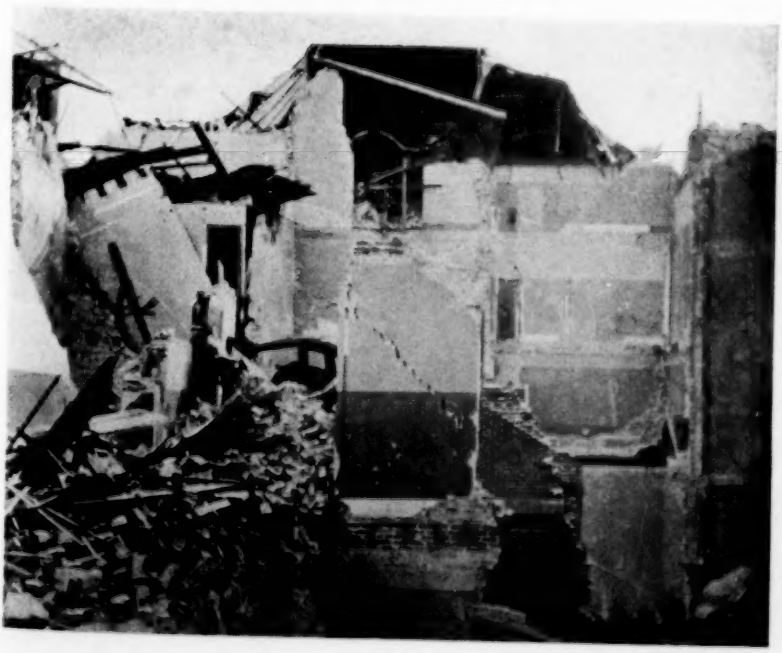

FIG. 8.

Notes and Comment

After-Care of the Insane.—The State Charities Aid Association of New York has recently taken up work for the after-care of the insane discharged recovered from State Hospitals, co-operating with the State Commission in Lunacy and the managers and superintendents of state hospitals. The need for some system of providing temporary assistance and friendly aid and counsel for persons who have suffered from mental disorders and have recovered has long been recognized and in many Europeans countries has for many years constituted an important branch of social or charitable work. In this country the subject has been discussed at many medical and charitable conferences but until now without any practical results. At the annual meeting of the American Medico-Psychological Association in 1893, Dr. P. M. Wise read a paper in which he urged the need of aid for recovered patients in the first weeks after their discharge from hospitals. In 1894 the subject was presented before the American Neurological Association by Dr. Henry R. Stedman and a committee consisting of Dr. Stedman, Dr. Charles L. Dana, and Dr. F. X. Dercum was appointed to investigate and report to the association upon some feasible plan for the aid and supervision of needy patients discharged recovered or improved, from institutions for the insane. In 1897 the report of this committee was submitted, strongly favoring the establishment of after-care work in this country, and presenting a large number of letters from medical superintendents of state hospitals and prominent alienists and neurologists in many parts of this country, the great majority of them favoring the initiation of a movement of this sort. Dr. Richard Dewey urged it in papers presented at the National Conferences of Charities and Correction in 1904 and 1905.

At the November and January conferences of the State Commission in Lunacy with the managers and superintendents of

State hospitals, the State Charities Aid Association was asked to organize and put into practical operation a system of after-care for the insane in the State of New York. Pursuant to this the Association's Committee on the Insane appointed a sub-committee on After-Care of the Insane, and this sub-committee is organizing After-Care Committees for the different state hospitals. Those for Manhattan, Willard and Hudson River are already appointed and in active operation. The sub-committee employs an agent who assists these hospital committees in visiting in their homes patients discharged recovered from state hospitals and assists them to secure employment or in other ways in which assistance or counsel may seem to be required. The work is of too recent establishment to show as yet very important results, but it seems likely to prove of considerable value in the prophylaxis of mental disorders.

At the annual meeting of the American Medico-Psychological Association at Boston the subject of After-Care was discussed by representatives of various states and the following resolution was unanimously adopted:

WHEREAS, the State Charities Aid Association of New York has recently established a Committee on the After-Care of the Insane, to work in co-operation with the State Hospitals for the Insane in that State, and to provide temporary assistance, employment and friendly aid and counsel for needy persons discharged from such hospitals as recovered, and

WHEREAS, In the opinion of the American Medico-Psychological Association, it is very desirable that there should be carried on in connection with all hospitals for the insane such a system of after-care, therefore,

Resolved, That the American Medico-Psychological Association expresses its gratification at the inauguration of this movement in the State of New York, and its earnest hope that similar work may be undertaken for hospitals for the insane generally.

THE ANNUAL MEETING.—If the prosaic individual, careful of speech and determined to be accurate at all hazards, should search the pages of this JOURNAL for appreciations of the annual meeting of our Association, he would probably find ample warrant for his suspicion that the latest gathering of the brethren has invariably been the most successful. The recorder may not always have reflected the average judgment as passed orally by those who are fond of making comparisons, and it may have

seemed expedient from year to year to withhold criticisms that do not look well in cold type however freely they may have been made at the time of the meeting. But whatever measure of merit may be adopted in the case of the Boston convention, one is well within the bounds of safety in declaring it at least one of the most successful that the Association has ever had. The place of meeting doubtless had much to do with that success. In Boston the atmosphere is ever congenial to high purpose of whatsoever sort, and to that city the weary children of men are always glad of an opportunity to betake themselves for intellectual or other refreshment. Those who yielded to this feeling during those memorable days of a lovely June, were well repaid for their journey. Boston never appeared fairer, and if occasionally interest in the tribune waned and one looked out of the windows of the assembly room into that incomparable American thoroughfare, Commonwealth avenue, one could not help experiencing, if in a chastened form, something of that complacency and contentment of soul that are supposed to belong by right only to him who is to the manner born.

Governor Guild gave the Association welcome in an address that breathed warmth in every word, and thereafter the Association, under the presidency of Dr. Burr, who wielded his gavel *secundum artem* and with admirable discretion, settled down to business with a will. The Committee of Arrangements had done its work well. Obeying the mandate of the Council it forbore to provide for the social entertainment of the members. This we regard a wise precedent. The Association has now grown so large that to attempt to entertain it as a body composed of units of various tastes and inclinations can no longer be managed with any reasonable hope of success. There are very many members who prefer not to take their pleasures gregariously on such occasions, and it is probably true that the individual may usually be trusted to obtain better results for himself by yielding to the random provocation of the moment rather than by following the pre-arranged programme of a committee.

The presidents address was in a new key and expressed an original conception. It was addressed as to a mixed audience composed not only of men, nor yet of physicians exclusively, and as such was greatly appreciated by his audience. The

essay was an interesting presentment and analysis of medical characters in fiction, old and new, and showed wide and careful reading.

Of the scientific papers one cannot speak in detail. Suffice it to say that they bespoke the higher standard of workmanship that nowadays prevails. One notices with pleasure that the merely perfunctory paper is disappearing and that our members are now writing largely because they have something to say. The gift of utterance without communication, a valuable asset to its possessor in its place, is not for display in scientific assemblies. For justification of our estimate of the work of the meeting as a whole we ask our readers to await the publication of the papers. Discussion might have been more active, it is true, but after all even that may be a hopeful token of a growing apprehension of the primary purpose of debate.

One could not but be impressed with the large variation in the choice of psychiatric nomenclature and in the different attitudes maintained by the readers, toward the newer psychiatry. At least seven distinct types of reader could be differentiated. There was the exponent of the psychiatry of former days, in happy ignorance of modern problems, placidly elucidating theories long since dead and buried. There was a second type clinging also to the old but crying out against the new in a manner indicating ignorance of the real significance of the innovations. Thirdly, he who having forsaken his own gods embraces with enthusiasm newer deities and talks glibly of matters beyond his ken. Then there was the broad, scholarly, well-read, older psychiatrist holding conservatively to that which has served him well, willing to be converted to a better faith, appreciating largely the later doctrines but yielding only where that is offered in place of theory. The inevitable iconoclast was, of course, present, ridiculing the old and the new alike, scoffing at the embarrassment of the newer school partially mired in a slough of its own formation, overwhelmed with the confusion of terms manufactured by itself in a strenuous endeavor to refine and define its own thought. To the admirers of this type we are constrained to suggest that one helping hand is worth a hundred fingers which point only to the obstructions. There is a very different type, reared entirely in this seasons nest with no

knowledge of the inconsistencies of theory and practice with implicit faith in the newest disease forms, clinical entities and theoretical differentiations. His saving characteristic is his unlimited capacity for work; the leavening influence afforded by the shattering of a few psychiatric ideals will in time produce in him our future psychiatrist. Lastly, there is the well-rounded, conservative, hard-working type, aware of the pitfalls and walking round them by the narrow pathway of consistent effort, forging ahead to the sure goal of success.

The president-elect of the Association is Dr. C. G. Hill, of Baltimore, with Dr. C. P. Bancroft, of Concord, N. H., as vice-president. Dr. Charles W. Pilgrim, of Poughkeepsie, N. Y., was elected secretary and treasurer. Under the officership of these gentlemen and a well chosen Council, the American Medico-Psychological Association may rest complacently on its Boston laurels pending its next meeting in Washington, D. C., jointly with the Congress of Physicians, of which it is a constituent member and with which it is required under the rules to meet in triennial convention.

Honor to Dr. Chapin.—At the commencement exercises of Williams College, held on June 27 last, the honorary degree of Doctor of Laws was conferred upon Dr. John Bassett Chapin, Physician-in-Chief and Superintendent of the Pennsylvania Hospital for the Insane. The incident is worthy of special note, as recognition of medical men for achievement in the direct line of professional work has been very rare, and no physician has ever before received an honorary degree from Williams College. The purpose of Williams College was to grant its highest honor to "one from the older graduates eminent in science."

Indeed, the conditions of the bestowal of this honor indicate an especially gratifying awakening to the progress made in the care of the insane, and to the honorable position in science, in charity and in philanthropy now granted to the department of mental medicine. The thought was well expressed by the presentation of Dr. Chapin as one who "by solving the problem of the humanitarian care of the mentally diseased, had touched the world's need with the hand of philanthropy guided by the mind of science."

The selection of Dr. Chapin by the College, as best qualified to meet these conditions, will prove most acceptable not only to his friends, but to all interested in the great principles which he is thus made to represent. American alienists, particularly, who have known his work and his worth will approve most heartily the characterization of the recipient of the degree by President Henry Hopkins, in awarding it, as a "Devotee of science, reformer of public charity, organizer of humane and rational treatment for the most miserable and helpless of human beings." The presentation was made by Professor Henry Daniel Wild.

Dr. Chapin received the degree of Bachelor of Arts from Williams College in 1850; and of Doctor of Medicine from the Jefferson Medical College in 1853; and he holds honorary membership in the Medico-Psychological Association of Great Britain and in the Society of Mental Medicine of Belgium. The events of his life which entitled him to the consideration of his Alma Mater were stated to be the "reform of the conditions of the insane poor in the State of New York and the origination of the system of segregation of the insane."

KARL FÜRSTNER.—Again one of the Masters of Psychiatry has died. On 25th April, 1906, in his fifty-eighth year, KARL FÜRSTNER, Professor in the University of Strassburg, passed away. Fürstner was a physician's son, he studied in Würzburg and Berlin, worked under Virchow and Westphal, and began his career as Professor of Psychiatry in Heidelberg in 1877. It was under his direction that the Heidelberg Clinic was opened, October 15, 1878. In 1891 he accepted a call to Strassburg to succeed Jolly, and was succeeded in Heidelberg by Kraepelin. In 1902 was held a celebration in his honor, commemorating the completion of a quarter of a century as *Ordinarius*.

Fürstner was a teacher of the first order, an oft-consulted authority in forensic medicine, and one of the pathfinders in clinical psychiatry. His work on the *Senile Psychoses* was one of the important contributions which have turned the attention of clinicians to the differentiation of various forms of alienation in the aged. The faculty for critical analysis and differentiation was made plain in his work on the *Psychoses of Pregnancy and the Puerperium* (1875), in which he separated from the stock-

forms mania and melancholia, the acute hallucinatory insanity which has appeared under so many different names (Delirious Mania, Amentia, *Confusion Mentale*, Katatonia, Acute Confusional Insanity, etc.). Of first importance are also the contributions of Fürstner to our knowledge of General Paresis.

In his death modern psychiatry has lost one of her foremost exponents.

C. B. F.

THE BRITISH MEDICAL ASSOCIATION—PSYCHOLOGICAL SECTION.—As the majority of our readers are doubtless aware, the British Medical Association holds its annual meeting this year in Toronto, Canada.

The programme of papers and discussions for all the sections as published in the British Medical Journal presents the promise of a most interesting meeting, but that of the Section of Psychology is the one which will attract the greater attention from those interested in psychiatric medicine.

The meeting will be from August 21 to 25, inclusive.

The following presents the organization of the Psychological Section, and the programme for the several days of the meeting.

BRITISH MEDICAL ASSOCIATION—PSYCHOLOGICAL SECTION.

President.—William Julius Mickle, M. D., London.

Vice-Presidents.—Nelson Henry Beemer, M. D., Toronto; Charles Kirk Clarke, M. D., Toronto; Reginald Langdon Down, M. B., London.

Secretaries.—Alfred Thomas Hobbs, M. D., Toronto; Goldwin W. Howland, B. A., M. B., M. R. C. P., Toronto; John Turner, M. B., Essex Asylum, Brentwood.

Sectional meetings take place at 9.30 every morning, August 21 to 24. The general meetings of the Association will be held in the afternoons, and various receptions and entertainments have been arranged for the afternoons and evenings. The programme, subject to changes and additions, is as follows:

1st Day, August 21.—(a) "Reflexes Among the Insane," Dr. Daniel Clark, Toronto; (b) "The New Psychology," Dr. Schofield, London; (c) "Cerebral Localisation in the Study of Psychiatry," Dr. Charles K. Mills, Philadelphia; (d) "Etiology of General Paresis," Dr. A. Ross Diefendorf, Conn.

Discussion: "General Paresis," led by Dr. Mickle, London (Clinical Side of General Paresis); Dr. Joseph Collins, New York; Dr. Sachs, New York (Pseudo General Paresis); Dr. Cowles, Boston.

2d Day, Wednesday, August 22.—(a) "Methods of Staining Central Nervous System" (illustrated by slides), Dr. Turner, Brentwood; (b) "Diagnosis and Treatment of Lesions of Peripheral Nerve," Dr. Sherries, McGill University; (c) "Feeble-minded Children," Dr. Shuttleworth, London; (d) "Relation of Epilepsy to the Blood and Central Nervous System," Dr. Turner, Brentwood; (e) "Biograph—Epilepsy and Moving Pictures," Dr. Spratling, Sonyea.

Discussion: "Epilepsy—Psychic Fits," led by Dr. Alden Turner, London; Dr. Spratling, Sonyea; Dr. Wm. G. Spiller, Philadelphia; Dr. Angell, Rochester; Dr. Shuttleworth, London.

3d Day, Thursday, August 23.—(a) "Insanity of Inebriety," Dr. Crothers, Hartford; (b) "Sterilization on Undesirable Degenerates," Dr. Rentoul, Liverpool; (c) "Types of the Devolutional Psychoses," Dr. Farrar, Baltimore; (d) "A Comparison of the Cells of the Human Cerebellum in Point of Resistance to Disease" (illustrated), Dr. Southard, Harvard University.

Discussion: "Dementia Præcox," led by Dr. Clarke, Toronto; Dr. F. X. Dercum, Philadelphia; Dr. Adolph Meyer, New York; Dr. Shuttleworth, London.

4th Day, Friday, August 24.—(a) "Application of Modern Hospital Methods to Treatment," Dr. Ryan, Kingston; (b) "Occupation as a Factor in the Treatment of the Insane," Dr. Mohr, Kingston; (c) "After-treatment of Convalescent and Discharged Patients," Dr. Dewey, Wauwautosa; (d) "Mental Processes Produced by Bodily Disease," Dr. Savill, London; (e) "Rational Psycho-therapeutics," Dr. Dubois, Berne.

Discussion: "Influence of Mind in Medicine," led by Dr. Schofield, London; Dr. Cowie, Bournmouth; President Hill, Clark University; Dr. A. E. Macdonald, New York.

Among others who hope to be present and take part in the discussions are Dr. Hurd, of Johns Hopkins; Dr. C. L. Dana (New York), Dr. August Hoch (New York), Dr. Hattie, of Halifax, and others.

We hope to present in the October number of the Journal a report of the sessions of this section. Dr. Clarke, of the Editorial Board, and one of the Vice-Presidents of the section, having promised to arrange for its preparation.

Book Reviews.

Walter Reed and Yellow Fever. By HOWARD A. KELLY, Professor of Gynecological Surgery. Johns Hopkins University. (New York: McClure, Phillips & Co., 1906.)

Although the author expresses his disappointment that he has been unable "to catch enough of that evanescent aura which we call a personality to convey in written words some clear notion of the man to whom it was given to make the greatest American medical discovery," the reader feels that his success has been great and that the scanty material at his hand has grown into a stimulating and interesting book.

Walter Reed was born in Gloucester County, Virginia, in 1851, the son of a clergyman, and on his father's and mother's side came of good English stock. He received his education in a private school and at the University of Virginia, where he graduated in medicine in 1869. He then went to New York and received the degree of M. D. a year later from Bellevue Hospital Medical College. He afterwards served as an interne in several hospitals in New York and Brooklyn, and at the age of 22 years was appointed one of the inspectors of the Brooklyn Board of Health. In 1875 he passed the required examination to enter the United States Army Medical Corps and was commissioned an Assistant Surgeon with the rank of First Lieutenant. In 1876, soon after his marriage, he was ordered to join his command in Arizona. At the end of four years he was ordered East for examination and promotion to the rank of Captain. In 1881 he was stationed for a short time at Fort McHenry, and there improved the opportunity to study physiology at the Johns Hopkins University (his first introduction to the methods of scientific research), where he familiarized himself with laboratory work under Martin, who had but recently come to the University from Cambridge, England. In 1882 he was transferred to the Department of the Platte in Nebraska. In 1887 he was ordered to Mt. Vernon Barracks in Alabama. In 1889 he was sent to Baltimore to take medical studies to fit himself for promotion to the rank of Major and there he began the study of pathology and bacteriology under Welch, and immediately took high rank as a student and an investigator. In 1891 he was sent to Dakota, where he remained until 1893 when he returned to Washington to become curator of the Army Medical Museum and professor of bacteriology and clinical microscopy in the Army Medical School recently organized by Surgeon-General Sternberg. His varied experience in the Army made him an excellent

diagnostician and gave him a courage of conviction and a fixedness of purpose which proved of great value in his subsequent scientific labors.

In 1898 when the Spanish-American War broke out Dr. Reed was anxious to fill a responsible position in the care of the sick, for which his experience had fitted him. He was familiar with the conditions of army life and knew how to preserve the health of troops under his charge, vital matters concerning which the civilian physicians and political doctors who were appointed were lamentably ignorant. He was chagrined and distressed to find that men without army experience but with political influence were preferred, while he and other surgeons of the army were relegated to comparatively unimportant positions. At the close of the war he was appointed upon a Commission to visit Cuba to investigate the cause of yellow fever. The story of his work in this Commission is told clearly and yet succinctly and the details of his investigations are given in successive chapters. When the Commission had failed to discover any bacterial cause for the disease, the attention of its members was directed to the death of a prisoner under strict guard and isolation in the Barracks at Pinar del Rio, Cuba. This suggested a special infection due probably to some insect and discredited the old doctrine of fomites which had given rise to many barbarities in an effort to quarantine non-infected communities against persons and their effects coming from infected regions.

There is not space to enter upon the remarkable series of experiments carried on under Dr. Reed's supervision, by which it was ultimately demonstrated that a form of mosquito known as *Stegomyia fasciata* was the carrier of the infection of yellow fever. The account given in the volume is complete and full of interest, and deserves careful reading. Chapters IV, V, VI, VII, and VIII are entitled in succession "History of Yellow Fever in the Past," "Insects and Diseases," "Work in Yellow Fever," and "Practical Application of the Mosquito Theory." Chapter IX treats generally of the value of the work of Walter Reed. Chapter X gives an account of his sudden illness and untimely death in November, 1902. Dr. Kelly gives due credit to the work of King, Finlay, Carter, Carroll, Lazear and Agramonte, and presents a charming narrative of the successive steps in the discovery. In concluding his work, the author remarks:

"The annals of Walter Reed's early years are refreshing in their simplicity. They record a natural, healthful life, with habits and interests in no wise different from those of thousands of American boys. Nothing in its circumstances or pursuits marked him as different from his fellows, and his character was distinguished from theirs, not by flashes and premonitions of genius, but by a remarkable uprightness, earnestness of purpose, and tenderness of heart. Neither his youth nor his mature years were characterized by any of those eccentricities which it is often the fashion to consider inseparably associated with genius; indeed, his whole life is a consistent witness to the falsity of the theory which exempts a man of unusual abilities from the laws governing mankind in

general, on the ground that exceptional talent is in itself abnormal. The popular idea that the gifted few are not responsible for their actions, because they are themselves a deviation from the normal, and that what are vices in their fellow-men are venial errors in them, finds no support in Walter Reed's life. Sanity, next to earnest Christian principle, was his distinguishing trait.

Again, let those who complain of the cramping influence of uncongenial environment, and insist upon the necessity of opportunity and sympathetic surroundings to a full intellectual development, review the record of the forty years spent by Reed, first in his quiet Virginia home, and then on the far Western frontier. The foundations of his achievements were not laid amidst a stimulating mental atmosphere, nor did he make success the one object in life to which all other aims were subordinated; on the contrary, the training which prepared him, quite unconsciously, to enter, fully equipped, upon the great work in store for him, was a constant, daily, unselfish devotion to the needs of others, often amid most uncongenial surroundings."

The volume is of absorbing interest and should be read by every physician. The simple story is charmingly told.

Gondoskodás Az Elmebetegekröl Mis Allambokman És Nálunk. Iota Dr. Pandy Kálmán, Kórháze fóorvas. XXXVIII. Táblával. (Gyulan; Nértesi Arnold Corvina, Könyvnomdája, 1905.) (*The Care of the Insane in Foreign Countries and in Our Own.* By Dr. Kalman Pandy, Chief Physician of the Hospital Gyula (Hungary), 1905.)

This volume of 450 pages with thirty-eight illustrations gives a record of the observations of Dr. Pandy, who had been sent to study the treatment of the insane in Central and Northern Europe by the County of Bekes (Hungary) with a laudable desire to improve the condition of its own insane. To use the words of Dr. Pandy, it was felt that Hungary was behind Russia even in the care of her insane and with the exception of Spain, Greece and Turkey was the most backward country of Europe in this respect. He ascribes this to the fact that Hungary has failed to avail herself of the services of specialists in the treatment of her insane and quotes with approval the words of Dr. F. Schwarzer, who said: "It cannot be denied or concealed that the government has not progressed with the advancing knowledge as to the insane, but permits itself to be led astray by a few doctors who have not been specialists and who maintain that the insane, just as other patients, can be cured in ordinary hospitals or sanitariums; and thus the government can save the amount necessary for insane hospitals."

Dr. Pandy has availed himself of the visits to the institutions of the various countries of Europe, made by Tucker of Australia in 1883 and Letchworth of New York in 1887, making use of the comments of the latter many times to confirm his own impressions of the institution visited. Thus for example in his account of his visit to an asylum at Gaustad in

Norway he says: "I have seen patients in the cells strew straw on the floors. The doors are closed with four-inch bolts. It made on me the impression of a criminal institution. Letchworth says that (most likely on account of these bolts) the whole institution made on him the impression that they were locking in this place the terrors of the Scandinavian mythology." In speaking of Woodilee he quotes with approval Letchworth's repetition of Rutherford's remark, "the most difficult as well as the most important part of asylum work is for the attendants to learn the peculiarities of the patients," and adds that it is "absolutely necessary that nurses should learn to know the patient's soul and not to consider him simply an idiotic automaton."

His observations are shrewd and his deductions are carefully and painstakingly made. He visited Norway, Sweden, Denmark, Scotland, Ireland, England, Holland, Belgium, France, Germany, Austria, Italy, Switzerland, Spain, Portugal and Roumania. To one who may have been accustomed to consider Hungary as a semi-civilized country it is most gratifying to find a county government initiating such an extensive and expensive tour of inspection with the sole object of obtaining information for the improvement of the treatment of the insane. It is equally gratifying to an American to know that the work of W. P. Letchworth, our own philanthropist in the same field, is so widely known and so authoritative.

A Primer of Psychology and Mental Diseases for Use in Training Schools for Attendants and Nurses and in Medical Classes and as a Ready Reference for the Practitioner. By C. B. Burr, M. D. Third edition, thoroughly revised. (Philadelphia: F. A. Davis Company, 1906.)

In the preface to this edition Dr. Burr tells us that the section on Psychology has been thoroughly revised and that the newer classification has been used. While not familiar with previous editions of this book, in the present one Dr. Burr has admirably succeeded in stating the subject in a simple way. The book is divided into four parts. First, Psychology; second, Insanity; third, Management of cases of insanity from the medical standpoint; fourth, Management of cases of insanity from the nursing standpoint. In all, the book occupies but 183 pages. In so small a compass it is easily understood that it is impossible to give full descriptions of diseases, but despite this the author has succeeded in presenting clear pictures, excepting possibly in one or two instances, these being under the infection psychoses and exhaustion psychoses. The book must be judged as a primer, and as such takes first rank. The first section, giving the necessary psychology for the proper understanding of the study of mental diseases, is presented most clearly. A particularly strong point in the book is the medical treatment, which is excellent, and the two parts on the nursing and medical treatment of cases are also admirably done. Dr. Burr deserves many congratulations.

W. R. D.

I Principi Fondamentali della Anthropologia Criminale. Guida per i Guidizi Medico-forensi nelle questioni di imputabilita. Dei DOTTORE GUISSEPE ANTONINI. Manual Hoepli. (Milano: Ulrico Hoepli, 1906.)

This series is perhaps too well known to need a detailed description. The subjects treated are by no means restricted to medicine. The volume under discussion is a book about four by six inches and contains 167 pages besides the list of other volumes of the series which occupies 64 pages. Its chief defect is common to the whole series and is the white cloth binding with pale blue stripes and red and black lettering, which is hardly durable enough for a book which is supposed to be carried in the pocket and subjected to frequent handling.

The book is divided into four chapters: Introductory, Criminal Anthropology, Medico-Legal Application, and Insanity. In the last the author adheres to the classification of Tanzi, and each form of mental disturbance is well but briefly described. It is no matter for wonder that pellagra should be more fully treated than any other form. The chapter begins with admirable directions for the physical and mental examinations.

The book will be chiefly valuable in this country as a combined exercise in Italian and an introduction to the views of Italians upon anthropology and psychiatry. Both of these functions it will serve admirably.

W. R. D.

Pneumonite Crupale con Speciale Riguardo alla sua Cura. Dei DOTTORE ANTONIO SERAFINI. Manual Hoepli. (Milano: Ulrico Hoepli, 1906.)

This book covers 222 pages and is divided into ten chapters, entitled Introduction, Etiology, Pathological Anatomy, Symptomatology, Anomalous Forms and Irregular Types, Course—Termination—Mortality, Diagnosis, Prognosis, Prophylaxis, and Therapy. The work is written in a very pleasing manner and the interest of the reader does not flag. It is difficult to pick out especial points of interest but perhaps the section on serum therapy is most interesting on account of the comparative novelty of the subject. In this the author first reviews the subject of immunity, then considers the work which has been done to isolate a specific anti-pneumonic serum, describing the work of Pane and giving the results of himself and others with his serum, finally discussing the anti-pneumonic serum of Fizzoni in the same manner. The whole work is well worth a perusal.

W. R. D.

Prontuario di Posologia dei Rimedi più usati nella Terapia Infantile. Dei DOTTORE ANTENORE CONELLI. Manual Hoepli. (Milano: Ulrico Hoepli, 1906.)

This compend of therapeutics for children is well arranged and is a convenient means of reference for dosage, etc. Under each drug is given the synonyms, characteristics, properties, incompatibles, dosage for various

ages, means of administration, and antidotes. An introduction gives information in regard to feeding, baths, douches, and general therapeutic measures.

The book concludes with a list of drugs and the average dose of each. It contains 186 pages. W. R. D.

Seventh Annual Report of the State Board of Insanity of the Commonwealth of Massachusetts for the Year ending September 30, 1905.

This report is one of the best state reports that we receive, as it is not unnecessarily padded by the inclusion of individual hospital reports, and the subject of insanity in Massachusetts is treated tersely yet with sufficient detail to satisfy the most exacting. The report proper occupies 141 pages, and an appendix containing financial statistics, statistical tables, directory and index, occupies 56 more. The whole is neatly bound in black cloth.

Family care of the insane which has been successfully carried on for several years continues to enlarge its function, forty patients have been added to the number cared for in this manner, making a total of 253, and as recommended in the last report, an act of the legislature has been passed permitting the trustees of the various institutions to carry on this form of care which hitherto has been solely under the control of the state board.

An interesting discussion is recorded on the subject of the criminal insane and their segregation which cannot but be suggestive to those interested in this class. W. R. D.

Transactions of the College of Physicians of Philadelphia. Third Series, Vol. 27. Printed for the College: (Philadelphia, 1905).

Unlike its predecessor, this volume contains a number of papers of neurological interest. The titles of these papers are: "The Relief of Uræmic Hemiplegia by Lowering Intracranial Pressure (Ten Cases)," by R. N. Willson; "Four Cases of Cerebrospinal Meningitis, Probably Due to the Pneumococcus," by R. N. Willson; "On Autosuggestion in Hysteria, Apropos of a Case," by Alfred Gordon; "The Treatment of Selected Cases of Cerebral, Spinal and Peripheral Nerve Palsies and Athetosis by Nerve Transplantation," by W. G. Spiller, C. H. Frazier, and J. J. A. Van Kaathoven; and "A Case of Cerebellar Tumor," by Burton Chance. Besides the above the medical and surgical papers are of special interest. A symposium on "Roentgen Ray Therapy" contains many points of value. The whole volume is quite up to the high standard which has been set in previous years, both in the quality of the papers and in the mechanical details. W. R. D.

Abstracts and Extracts.

Le signe de Kernig dans la paralysie générale. Par le Dr. Darcanne. Communication faite au Congrès de Rennes. Journal de Neurologie, An. 11, p. 91, 5 Mars, 1906.

The author states that Kernig's sign is frequent in the final period of general paralysis and, although encountered less often, nevertheless exists in the earlier periods.

Twenty-six women and four men were examined. Of the twenty-six women, ten showed the sign distinctly, one doubtfully. Eight of these ten were in the final stage—two were in the second period. Of the four men, one was in the first stage.

The author considers Kernig's sign in these cases to be due to a central lesion or a medullary lesion, and this view is confirmed by the fact that it is often accompanied by an exaggeration of the reflexes, ankle clonus and Babinski's sign, signs which indicate a lesion of the spinal meninges or of the pyramidal tracts. He thinks that the sign is of diagnostic value, inasmuch as it is often present in the early stages, when the Argyll-Robertson pupil is not present.

It is of prognostic value in that it indicates in general paralysis the rapid evolution of the disease and the near approach of medullary troubles.

Ricksher.

On the Etiology of Asylum Dysentery. M. D. (Cantab.) Thesis, with some recent additions. By W. Bernard Knobel. The Journal of Mental Science, April, 1906; pp. 317-345.

The author at the outset defines dysentery, and following Manson, understands it to mean that there are symptoms indicating an inflamed condition of the colon, and is synonymous with colitis. He further distinguishes, because of the uncertain etiology, "asylum" dysentery or "asylum" colitis as a separate sub-group.

He presents tables showing how prevalent the condition (dysentery) is in asylums and how large is the death rate, both of which feaures are in contradistinction to the comparative rarity in the Metropolitan general hospitals and workhouses and poor-law infirmaries in London, and further, the condition does not prevail at all in any of the prisons in England and Wales.

The total number of deaths from dysentery in all the asylums in 1903 was 257, and the total number of deaths in England and Wales from

this cause for the same year was 310, showing the large number of deaths in asylums from a condition comparatively rare elsewhere. With this as a starting point the author endeavors to show in detail some of the factors which seem to be of importance from the standpoint of etiology with a discussion of views of other writers.

The Bacteriologie features are first discussed, and the author opposes the view that all cases of dysentery are the result of the action of one micro-organism, believes that many varieties, either acting singly or producing a mixed infection, are capable of producing the disease. He then notes that the B. dysenteriæ (Shiga) and the amœba coli are known causes of dysentery—the former of epidemics in Japan, and the latter of the endemic forms common in the tropics. Other organisms thought to be etiological factors are the B. coli communis, and B. pyocyaneus.

It is noted that the B. enteridis sporogenes was the probable cause of the outbreak at the Derby County Asylum in 1899. The work of Goodliffe and Gemmel in connection with an outbreak at Lancaster County Asylum, which lasted for two years, is next spoken of. Here a micro-organism resembling the B. coli was isolated, but Goodliffe regarded it as a distinct micro-organism, and he termed it the bacillus of ulcerative colitis. The author next quotes the results of Eyre at Claybury in 1904, who found the B. dysenteriæ (Shiga) to be the micro-organism present in the stools; and McWeeny, who in April, 1905, who in series of cultures showed an organism he had isolated from the stools, which resembled the typhoid bacillus. The author inclines to the view that the organism described by Eyre, Goodliffe, and McWeeny are types of the same bacillus, but expresses doubt as to its exact nature, there not being sufficient evidence at the present time to assume that any given micro-organism is the etiological factor.

He then discusses other factors which have possibly some significance in the causation, firstly discussing the soil, he states that the disturbance of the subsoil is a factor to be reckoned with, and in support of this quotes outbreaks in new asylums which were planned and built with special care as to hygienic arrangements, and further in certain asylums which had been peculiarly free from dysentery after extensive alterations, necessitating disturbance of the subsoil, epidemics occurred.

Next the fact that breathing sewage effluvia may cause outbreaks of dysentery is noted, and evidence is quoted in support of this, showing how individual cases of diarrhœa have followed, after a short interval, the inhalation of putrid sewer gas. This is avoided in London, for example, by diluting the sewage.

The way in which this gas acts as a causative agent is thought to be by lowering the resistive powers. He furthermore states that an atmosphere laden with a fæcal odor does in time decidedly lower the power of resistance, quoting Alem's Experimental Work. This fæcal odor or "privy atmosphere" exists in asylums owing to the untidy habits of many patients, and this cannot be altogether overcome despite everything that may be done. This the author considers a "potent predisposing factor."

The classes of patients most often affected are next discussed, and it is noted that general paralytics among the males, and katatonics among the females, with patients of both sexes suffering from organic dementias, *i. e.*, patients who are markedly deteriorated; also present to a less extent among the chronic psychoses and absent in congenital cases, which is worthy of note, since in congenital defectives there is, as is well known, a reduction in the natural immunity of the tissues.

Cowan and Claye Shaw's view that asylum dysentery is due to a trophic lesion of the intestine and the refutation of this theory by Mott is mentioned by the author, and he is of the opinion that the throwing out of the theory in its entirety has been detrimental to the advancement of our knowledge concerning the condition, and notes that a disturbance in the function of the cortical nerve cells as a result of the disease process might result in a secondary disturbance in the trophic function possessed by the nerve cells in the cord, and as a consequence a lowering of vitality of the tissue cells in the intestines, thereby lowering their resistive power.

The author then gives an extract from a paper by Lorraine, Smith, and Tenant on "The Growth of Bacteria in the Intestine," where these observers state that any lowering of the trophic power of the intestinal wall with a consequent increase in bacterial growth would first be noted at the ileocæcal valve and then in the large intestine, and the author states that the region of the cæcum is frequently the seat of the greatest inflammation. Certain cases of cord lesions are then given where there was associated acute inflammation of the colon. He next notes various conditions which are probably due to impairment of the neurotrophic functions and concludes there are good grounds for regarding as one of the most important factors in the causation of asylum dysentery, the alteration in the normal control exercised by the intestine over the growth of colon bacteria and a diminution of the resistive powers of the intestine to outside organisms.

The question as to whether the condition is contagious is next discussed, and statistics are just quoted to show that in the London County Asylums there has been no diminution in the number of cases since greater precautions have been taken to isolate patients suffering from dysentery, and here presents several charts which go to disprove any relation between the occurrence of fresh cases and the transference of patients after an attack of dysentery from one ward to another, and finally concludes that there is no evidence to show that dysentery is contagious.

As to the age at which asylum patients are most likely to be subject to dysentery the author notes that in the average of cases corresponds with the average age of patients. Males, 50; females, 51-53. Furthermore it rarely occurs in children.

Males and females are equally liable to be affected. Occupation does not appear to have any influence on the occurrence, nor does filth eating, as has been stated by various authors. Meteorological conditions do not appear to influence to any great extent the incidence of dysentery. As

to season, the cases are generally more prevalent in late summer and early autumn than at other times.

The author next gives a summary of the p. m. findings in 100 cases dying at Betley Asylum at variable time, from or after an attack of dysentery, and finally gives the following summary:

I. That dysentery in this country (England) is mainly confined to lunatic asylums.

II. That it does not occur, except rarely, in other large institutions, such as prisons and workhouses.

III. That the increased precautions, etc., that have been taken during the last few years have made no appreciable difference to the incidence of, or the mortality from, this disease.

IV. That there is strong evidence in favor of the view that not one but many micro-organisms, either singly or as a mixed infection, can give rise to dysentery.

V. That disturbance of the subsoil in the neighborhood of an asylum is very liable to be followed by an outbreak of dysentery in that asylum.

VI. That the evidence, deduced from the relation between the inhalation of sewage effluvia and dysentery, supports strongly the theory that asylum dysentery can be caused by some micro-organism which normally inhabits the colon and becomes pathogenic when the resisting power of the tissue is sufficiently reduced.

VII. That the occurrence of asylum dysentery in members of the staff of an asylum is probably due either to infection by a virulent form of some universal organism, or to some normal colon organism becoming pathogenic, owing to the reduction of immunity caused by the frequent breathing of an atmosphere permeated by a fæcal odor.

VIII. That there is strong evidence to support the theory that, in lunatics, the vitality and resisting power of all tissues to infection is reduced, owing to the impairment of their trophic nerve supply.

IX. That dysentery is particularly apt to occur in lunatics owing to the deterioration of nerve cells affecting the trophic nerve supply to the colon.

X. That it is far less apt to occur in congenital cases of insanity or those in whom the mental disease is stationary.

XI. That the statistical evidence is entirely against the view that dysentery is spread by the transfer of recovered cases from ward to ward.

FITZGERALD.

The Early Ocular Signs of Dementia Paralytica. By WARD. A. HOLDEN. Journal of Nervous and Mental Diseases, Vol. 32, p. 713. Nov., 1905.

The author briefly records his finding in a series of seventy uncomplicated cases of paresis, *i. e.*, where tabes was not suspected.

The cases were examined as soon as a positive diagnosis of paresis was made and were almost all in the early stage of the condition.

The writer's method of examination is as follows: He directs the patient at first to look out the window for a minute or two and then to

look at the ceiling, when the pupils dilate since less light enters the eyes. The patient then looks alternately from the window to the ceiling, remaining in each position one minute.

When the pupils are sluggish he suggests that the patient first face the light and then turn his back to it, doing this with both eyes open and then with each eye closed. With this method the author claims that the reflex from the cornea does not interfere and that irregularities and inequalities in the pupils can be well defined. Also that by covering either eye with the hand and exposing the other the direct and consensual reaction can be determined. The size of each pupil is measured with a pupillometer while the other eye is closed.

To elicit sensory reaction the skin of the back of the neck is pinched several times after the pupils have come to rest. The gaze having been fixed on a certain point; waiting until hippus movements cease. The author considers this of importance because such hippus movements are frequently found in paresis.

It is noted that certain physiological variations in the size of the pupils occur, for example, larger where the irides are blue than where they are brown, large in cases of myopia, large in childhood, smaller in adults, and smallest in old age. Between the ages of 25 and 35 the pupils measure from 4.5 to 6 mm., the average being 5.25 mm., and in a series between the ages of 40 and 50 the range was from 3 mm. to 4.5 mm., the average being 3.75 mm.

The sensory reflex is usually well marked in early life and is often absent in old age. The shape of the pupil often shows variations at different ages, being regular in youth and frequently being irregular in old age.

Inequality of the pupils is common and may have no pathological significance. Cases of alternating mydriasis are common in paresis, where the relative sizes of the two pupils change, and there may also be alterations in the sensory and light reactions during the examination.

The author in common with many other observers notes that in all his seventy cases there was not one case of optic atrophy.

Then the results are tabulated under the following heads: sex, age, vision, refraction, fundi, shape, size of pupils, sensory, light and convergence reactions. The following conclusions are arrived at: In uncomplicated cases of paresis early in the disease there is an almost constant absence of the sensory reflex. In half the cases irregularities in the outline of the pupils; in nearly half inequality of the pupils; in more than half small pupils; in one-fifth loss of light reflex; in another fifth markedly sluggish light reaction, and in a few of these a diminution of convergence reaction; lastly, while the absence of the sensory reflex, myosis and irregularity of the pupils may not be very significant late in life, they are of very considerable importance earlier in life.

FITZGERALD.

On the Pathogenesis of Some Impulsions. By PIERRE JANET. Journal of Abnormal Psychology, Vol. 1, p. 1, April, 1906.

Dr. Janet briefly discusses impulsive acts in general and then gives short abstracts, with comments, of five cases who respectively showed impulsions of dipsomania, of gluttony, of dromomania, and of self-mutilation. He draws attention to the periodicity of these impulsions and discusses the cases cited and makes frequent references to others whom he has observed, and finds that all of these cases have had a common origin in attacks of depression which the impulsions in a measure relieve. He believes that treatment of these impulsions should be directed to the prevention of these underlying attacks of depression.

W. R. D.

Pamphlets Received.

Columbus State Hospital, The Sixty-seventh Annual Report to the Governor of the State of Ohio for the fiscal year ending November 15, 1905.

Fifty-fifth Annual Report of the Managers of the Syracuse State Institution for Feeble-Minded Children for the Year 1905.

Detroit College of Medicine. Announcement for Session of 1906-1907.

Medical Educational Standards.

A Case of Heteroplastic Ovarian Grafting, Followed by Pregnancy and the Delivery of a Living Child. Robert T. Morris, M. D. Reprinted from Medical Record, May 5, 1906.

Railway Brain Strain of and Brain Strain Regulation of Railway Employes. C. H. Hughes, M. D. Reprint from the Alienist and Neurologist, May, 1906.

Psychoencephalonasthenia or Cerebrasthenia Simplex, and Psychoencephalonasthenia or Cerebrasthenia Insaniens. Charles H. Hughes, M. D. Reprint from the Alienist and Neurologist, May, 1906.

Prospectus of The American Pharmacologic Society and the Working Bulletin System for the Co-operative Investigation of New Materia Medica and Food Products. F. E. Stewart, M. D.

Sixty-fourth Annual Announcement of Rush Medical College, containing the Bulletin of the Medical Courses of the University of Chicago.

Georgetown University Publication. Bulletin of the School of Medicine and Dental Department. Announcement for the Session of 1906-1907.

The Maryland Agricultural College Quarterly. No. 32. May, 1906.

Proceedings of the American Medico-Psychological Association at the Sixty-first Annual Meeting held in San Antonio, Texas, April 18-21, 1905.

College of Physicians and Surgeons of Los Angeles, California, Annual Announcement, Session of 1906-1907.

New York Post-Graduate Medical School and Hospital. Twenty-fifth Annual Announcement.

Albany Medical College. Announcement for Session 1906-1907.

Autointoxication: Its Factors, Results and Treatment. By H. C. B. Alexander, M. D. Reprinted from Medicine.

Legal Aspects of Epilepsy. By H. C. B. Alexander, M. D. Reprint from the Alienist and Neurologist, May, 1906.

Abbott's Alkaloidal Digest.